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This will handle  
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requirements in  
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CONTROL DIAGRAM FOR  
RADIANT HEATING

CONTROL DIAGRAM FOR  
PHOTOMETRIC LAB SUPPLY

*Correctly*  
**APPLIED**

Product Development & Testing  
Laboratory, Benjamin Electric Mfg.  
Co., Des Plaines, Ill. Perkins &  
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Hedrich-Blessing Studio.

The purpose of Benjamin Electric Manufacturing Company's new \$100,000 Laboratory is "to contribute to the advancement of the science and art of illumination." The building embodies many new and unique advancements in construction, equipment and design. The keynote of the building itself—and of the work which is to be performed there—properly may be said to be "The Proper Equipment... CORRECTLY APPLIED." And that, too, is the keynote of Johnson Systems of automatic temperature control.

In this interesting building, Johnson Control for Radiant Heating varies the temperature of the water supplied to the heating surfaces according to the outdoor temperature. This assures a change in the heat

input to the radiant surfaces immediately upon a change in weather conditions. Irritating "thermal lag" is overcome... For the Photometric Laboratory, Johnson Control of the central plant air conditioning system is extremely important because of the facts that the area is windowless and devoted to precise instrument work. Provision is made for the automatic regulation of future cooling coils.

The hook-up diagrams for the guidance of engineer, installation mechanic and operator—reproduced above—are typical of Johnson-engineered installations. Ask us to help solve *your* next temperature control problem. JOHNSON SERVICE COMPANY, Milwaukee 2, Wisconsin. Direct Branch Offices in Principal Cities.

**JOHNSON** *Automatic Temperature and*  
*Air Conditioning* **CONTROL**  
DESIGN • MANUFACTURE • INSTALLATION • SINCE 1885

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# MANUFACTURERS RECORD

ESTABLISHED 1882

*A Publication for Executives*

Volume 115 NOVEMBER, 1946 Number 11

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**Cover Illustration**—Workmen silhouetted against the Texas sky as they speed completion of one of three 30,000-barrel storage tanks, which along with one 55,000-barrel tank give the Irving terminal of Humble Pipe Line Company a total of 145,000 barrels. The terminal is the end of the newly completed 276-mile Texas pipe line, article on page 48.

### MANUFACTURERS RECORD PUBLISHING CO.

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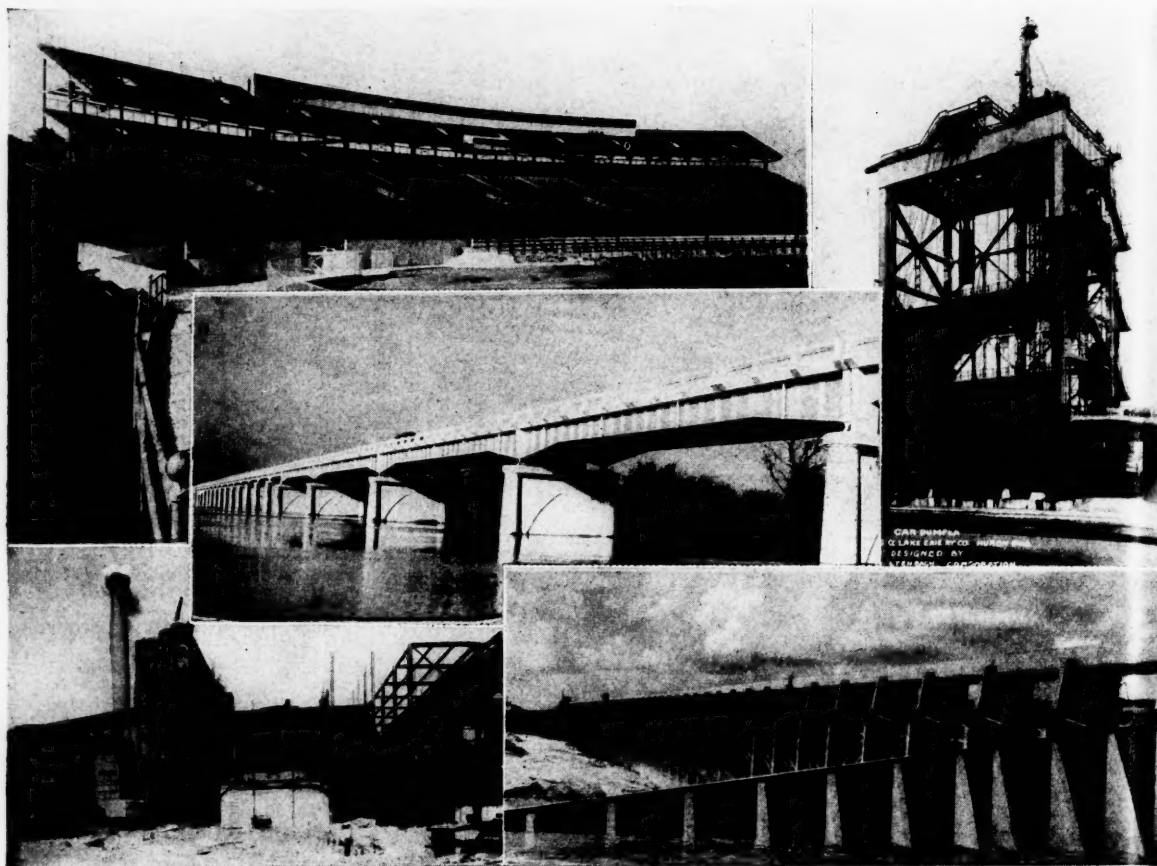
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# NEW AND EXPANDING PLANTS

COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

## ALABAMA

**BIRMINGHAM** — Laboratory — Southern Research Institute, 917 South 20th St., has plans in progress for construction of laboratory building, cost \$65,000.

**BIRMINGHAM** — Warehouse — Kraft Food Co., Chicago, Ill., let contract to Del E. Webb Construction Co., Chicago, Ill., for warehouse, estimated to cost approximately \$200,000.

**BIRMINGHAM** — Plant — Equitable Securities Corp., Brownlee O. Currey, President, Nashville 3, Tenn., has acquired Moore-Handley Hardware Co., in Birmingham of which W. W. French, Sr., is President; distributes all types of hardware.

**BIRMINGHAM** — Warehouse — United Auto Supply Co., Birmingham, let contract to A. L. Sullivan, for construction of addition to warehouse, cost \$15,000; concrete block, 50x100.

**BIRMINGHAM** — Additions — Southern Natural Gas Co., filed application with FPC for authorization to construct additions to gas transmission system operating in Alabama, Louisiana, Mississippi and Georgia, and to construct branch lines to deliver gas at wholesale for distribution in Chattanooga, Tenn., and in Lexington, Miss., estimated cost \$8,232,120.

**BIRMINGHAM** — Plant — Bobbi Motor Car Corp., P. O. Box 1528, has leased approximately 400,000 sq. ft. of the former Bechtel-McCone plant; Company manufactures a midjet automobile. Company formerly of San Diego, California.

**FLORALA** — Bus Station — Waller-Barnes Construction Co., Andalusia, low bidder at \$39,000 for construction of one-story, masonry construction bus station.

**GADSDEN** — Expansion — Goodyear Tire & Rubber Co., A. C. Michaels, plant manager, plans \$450,000 expansion program at newly completed sole and heel factory.

**ONEONTA** — Warehouse — J. A. Bynum, has contract for warehouse, cost approximately \$25,000 for Alabama Power Co.

**PIEDMONT** — Factory Building — Piedmont Developing Co., plans one-story factory building.

## ARKANSAS

**BENTONVILLE** — Plant — Arkansas Farm Bureau Poultry Cooperative, Inc., J. O. Kump, Manager, let contract to E. V. Bird Construction Co., Fayetteville, for poultry processing plant.

**CAMDEN** — Addition — International Paper Co., Southern Kraft Division, has CPA approval for addition, estimated cost \$239,000; increase of 51,000 tons annually in the output of paper pulp.

**FT. SMITH** — Depot — St. Louis-San Francisco Railroad, St. Louis, Mo., plans depot, costing \$27,500.

**JOINER** — Shop — John B. Wilson, has CPA approval for \$11,000 repair shop.

**LITTLE ROCK** — Storage Shed — Little Rock Road Machinery Co., has CPA approval for \$12,000 for storage shed.

**LITTLE ROCK** — Plant — Kimball Hardware Co., of Texarkana, incorporated with Joe Rosenbloom, and Associates; engage in wholesale and retail lumber business.

## FLORIDA

**CORAL GABLES** — Building — Rennart Lumber Yards, Inc., 226 Alhambra Circle, let contract to Deigaard & Preston Builders, 264 Giralda Ave., for one-story manufacturing building, 440 Ponce de Leon Blvd., cost \$80,000.

**CORAL GABLES** — Building — F. M. Shelton, 413 Cadagua Ave., let contract to Mackle Co., 2818 Coral Way, Coral Gables, for construction of one-story manufacturing building, cost \$14,000.

**DAYTONA BEACH** — Addition — Barge-Thompson Co., Atlanta, has contract for addition to telephone building, for Southern Bell Telephone & Telegraph Co., Atlanta, Ga., estimated cost \$250,000.

**FORT LAUDERDALE** — Warehouse — C. L. Winningham, let contract to Caldwell-Scott Construction Co., Inc., 120 SW First Ave., for construction of warehouse, cost \$20,000.

**FORT LAUDERDALE** — Warehouse — Brown Grain & Supply Co., 200 SW 23rd Street, let contract to Witter Construction Co., Miami, for construction of warehouse, cost \$120,000.

**JACKSONVILLE** — Manufacturing Plant — Wilson & Toomer Fertilizer Co., let con-

tract to George D. Aucheter, for sulphuric acid manufacturing plant, to cost \$300,000; steel contract awarded to Aetna Steel Co.; plant to be located on Talleyrand Ave.

**MIAMI** — Plant — Miami Typesetting Co., 127 NW 2nd St., let contract to Maurer & Freiberg Construction Co., 2511 NW 2nd Ave., for one-story smelting and composing plant, 2015 NW 1st Ave., cost \$10,000.

**MIAMI** — Addition, Etc. — Southern Wood Industries, Inc., let contract to Taylor Construction Co., 1776 Purdy Ave., Miami Beach, for addition and alterations to shop building, 7260 NW Miami Court; cost \$15,000.

**MIAMI** — Plant — Joseph F. Bradley, 2312 SW 17th St., Architect, has plans in progress for one story packing plant.

**MIAMI** — Addition — Southern Bell Telephone & Telegraph Co., Division Offices, Atlanta, Ga., let contract at \$600,000, to Barge-Thompson Co., Atlanta, for addition to building at 36 NE 2nd St.

**MIAMI** — Generator Plant Addition — Florida Power & Light Co., Ingraham Bldg., plans addition to generator plant on Miami River; cost \$530,000.

**MIAMI** — Millwork Shop — Gary Rogers, 655 NW 51st St., will erect one-story millwork shop, NW 37th Ave., cost \$10,500.

**MIAMI BEACH** — Buildings — Charles & Cyrus Nicholson, 218 Alton Road, constructing one-story storage building, NW 29th Street, Dade County, cost \$12,778.

**Southern  
Industrial  
Contracts  
in October  
Valued at  
\$34,000,000**

**MIAMI BEACH** — Expansion — Miami Beach Railway Co., Tom E. Lewis, vice-president and general manager, plans \$1,000,000 expansion program, including a modern garage, office and repair plant on Alton Road, short distance south of 5th Street, cost \$750,000.

**ORLANDO** — Building — Datson's Dairy, let contract to Stevens & Sipple at \$43,000, for dairy and office building.

**PANAMA CITY** — Factory — J. G. Scherf, Andalusia, Ala., erect textile factory, plans for which are in the hands of Engineers.

**ST. PETERSBURG** — Building — Miller & Jones, has contract for compressor building at gas plant, steel frame.

**TAMPA** — Laundry — Baby Dydee Service, Inc., let contract to O. P. Woodcock Co., Jacksonville, for construction of laundry plant, approximately \$25,000.

**TAMPA** — Warehouse, Office — Kraft Foods Co., Chicago, Ill., let contract to Del E. Webb Construction Co., Chicago, Ill., for construction of warehouse and office building, cost approximately \$200,000; 13,000 sq. ft., concrete block construction.

## GEORGIA

**ADAMSVILLE** — Office Building — Metal Arts Manufacturing Co., 501 Mortgage Guarantee Building, Atlanta, to award contracts for construction of concrete block, one-story office building.

**ATLANTA** — Warehouse — Mechanical Equipment Distributors, let contract to G. Lloyd Preacher, Jr., & Associates, Bona Allen Building, for construction of one-story warehouse type building.

**ATLANTA** — Garage — Atlantic Greyhound Lines, H. Pierce Brawner, Vice-President, Atlanta, plans construction of new garage, cost \$300,000.

**ATLANTA** — Truck Repair and Service Building — Davison-Paxon Co., plan one-story truck repair and service building, to cost approximately \$26,000.

**ATLANTA** — Telephone Building — Southern Bell Telephone & Telegraph Co., let contract to Barge-Thompson, 136 Ellis St., N. E., for one-story and basement telephone exchange building, on Hollywood Rd., to cost approximately \$150,000. Also preparing plans for expansion of Chamblee-Doraville service at cost of over \$300,000.

**ATLANTA** — Warehouse — Cox Foundry & Machine Co., plans construction of warehouse, Cox Ave., SW; one-story, 50x100, masonry and steel construction.

**ATLANTA** — Warehouse — National Fruit Products Co., 725 Humphries St., is receiving bids for one-story warehouse building, cost approximately \$25,000.

**ATLANTA** — Expansion — The Atlanta Gas Light Co., Rock G. Taber, Pres., plans three year expansion program, involving expenditure of \$6,000,000.

**ATLANTA** — Expansion — Eastern Air Lines, Capt. Eddie Rickenbacker, President and General Manager, plans expenditure of approximately \$1,500,000 for expansion of hangar and shop facilities at Atlanta Municipal Airport.

**ATLANTA** — Office — Southern Electric Equipment Distributors, let contract to Dye Construction Co., 1118 W. Peachtree St., for construction of concrete block, one-story and part basement, office and warehouse, 1375 Lee Street, cost \$15,000.

**ATLANTA** — Addition — Wesley & Co., has contract for construction of brick warehouse addition for Electric Sales & Service Co., cost \$25,000; one-story.

**ATLANTA** — Building — Roy Livingston, Atlanta, let contract to Griffin Construction Co., Atlanta, for construction of 6-story garage building to be built on Spring Street, rear of Cone Street Garage; contract price \$129,751.

**ATLANTA** — Remodeling — E. Bennett, Chief Engr., Southern Railway Co., Knoxville, Tenn., received bids for remodeling Atlanta Terminal Station.

**ATLANTA** — Repair Shop and Station — Wagstaff Motor Co., Spring St., NW, let contract to Ray M. Lee Co., 1004 Edgewood Ave., for construction of repair shop and gas station.

**AUGUSTA** — Addition — Graniteville Co., plans construction of concrete and steel mill addition, cost \$30,000.

**AUGUSTA** — Bus Terminal — Atlantic Greyhound Lines, H. Pierce Brawner, Vice-President, Atlanta, plans new bus terminal, cost \$271,352.

**AUGUSTA** — Exchange Addition — Barge-Thompson Co., 136 Ellis St., N. E., Atlanta, has contract for addition to telephone building, 327 Greene St., cost approximately \$400,000; three story, reinforced concrete frame.

**BRUNSWICK** — Bus Station — Atlantic Greyhound Lines, H. Pierce Brawner, Vice-President, plans erection of new bus station, cost \$177,506.

**COLLEGE PARK** — Bus Terminal — Suburban Coach Co., 981 Ashby St., Atlanta, Ga., SW, plans construction of brick one-story bus station, cost \$15,000.

**DARIEN** — Building — Mose Edenfield, Brunswick, plans construction of one-story concrete block garage and sales room, estimated cost \$30,000.

**DAWSON** — Building — Terco Milling Co., Inc., L. J. Ferguson, plans re-construction of plant destroyed by fire.

**GAINESVILLE** — Post House — Atlantic Greyhound Lines, H. Pierce Brawner, Vice-President, Atlanta, plans construction of Greyhound Post House, cost \$125,000.

**LAGRANGE** — Exchange Building — Southern Bell Telephone & Telegraph Co., Atlanta, let contract to Barge-Thompson Co., Atlanta, for two-story and basement telephone exchange building, cost approximately \$200,000.

**Macon** — Storage Building Alterations — Georgia Southern & Florida Railway Co., Southern Railway Building, Washington, D.

(Continued on next page)



C., will soon start to work on alterations to building, estimated cost \$30,000.

**MOULTRIE**—Addition—Swift and Company has CPA approval for \$40,500 addition to Coler building, North Main Street.

**SANDERSVILLE**—Plant—Georgia Limestone and Chemical Co., Henry Brandon, President, plans opening of quarry near Sandersville, and erection of plant.

**SAVANNAH**—Addition—National Gypsum Co., Buffalo, N. Y., and Savannah, let contract to Artley Co., 504 E. Bay St., Savannah, for construction of addition to manufacturing plant, including new dryer facilities and rock reclaiming conveyor system.

**SAVANNAH**—Warehouse—Carl Espy, Jr., let contract to Espy Paving & Construction Co., at \$38,000, for construction of warehouse and office building.

**TOCCOA**—Plant—North Georgia Processing Co., let contract to A. K. Adams Co., 542 Plum St., N.W., Atlanta, for construction of 2-story thread manufacturing plant, cost \$100,000; 100 x 121.

**VALDOSTA**—Dairy Building—Vollatton Brothers let contract to J. N. Bray Co., Valdosta at \$30,000 for construction of dairy building.

**VALDOSTA**—Repair Shop—Valdosta Radiator & Glass Co., 603 S. Patterson Street, have CPA approval for construction of 1-story glass and radiator repair shop building, cost approximately \$10,000; concrete block, built-up roof.

**VIDALIA**—Warehouse—Thomas & Howard Co., let contract to Somers Construction Co., Vidalia, for construction of concrete and steel warehouse, cost approximately \$90,000; CPA approval.

## KENTUCKY

**LOUISVILLE**—Improvement—Wood Mosaic Co., 5,000 Crittenden Drive has CPA approval for \$70,000 worth of improvements.

## LOUISIANA

**ALBANY**—Plant—Marion T. Fannally, Inc., Ponchatoula, has plans and specifications in progress for one-story all concrete steel bar joists and steel columns, food processing plant; cost approximately \$35,000.

**BATON ROUGE**—Plant—Ethyl Corporation, Clinton W. Bond, Mgr., having plans and specifications drawn for two modern buildings, costing approximately \$1,000,000; one a medical and personnel building; other a development laboratory and pilot plant.

**BATON ROUGE**—Plant—Standard Asbestos Manufacturing & Insulating Co., 2723 Ontario St., plans erection of pipe-coating plant; A. W. Fuerst, Manager.

**DENHAM SPRINGS**—Plant—C. C. Hornsby and Boyce Miller plans construction of frozen food locker and meat curing plant, will be housed in a concrete block building on Highway 190; to contain 300 steel lockers.

**GREYNA**—Refinery—Bids received for new modern 4-story refinery plant building for Southern Cotton Oil Co.

**HOUMA**—Gas Pipe Line—J. J. Munson, has applied for War Department permit to authorize installation and maintenance of 2-inch gas pipe line under and across Houma Canal Intercoastal Waterway at Crescent Blvd.

**INDEPENDENCE**—Plant—Colonial Cannery has plans and specifications underway for construction of new cold storage plant; 200 x 130; one-story reinforced concrete and brick construction with bar joists and composition roof; cost \$240,993.

**LAKE CHARLES**—Mill—Harless Lumber Co., P. O. Box 585 plans moving acquired band mill of Jerome Sheip Lumber Co., of Apalachicola, Fla., and erecting it on site in Lake Charles.

**NEW ORLEANS**—Building—Universal Pictures, Inc., let contract to George A. Fuller Co., Munsey Building, Washington, D. C., for construction of new one-story and penthouse, cost approximately \$150,000; 75 x 130, reinforced concrete building.

**NEW ORLEANS**—Warehouse—Lane Cotton Mills has plans in progress by Favrot & Reed, Nola Building, Architects, for construction of warehouse; cost \$73,000.

**NEW ORLEANS**—Repairs—Dan J. Duvoisin let contract to J. Gordon Lee, Carondelet Building, for repairs and alterations, construction of addition and make structural changes to building, 856 Carondelet St., cost \$25,000.

**PEARL RIVER**—Plant—Ozone Growers' Co-operative plans construction of sweet potato dry kiln, dehydrating and canning factory in St. Tammany Parish; other buildings to be started after kiln is completed, including a syrup mill.

**WINNFIELD**—Mill—Tremont Lumber Co., C. H. Lindsay, vice-president and general manager, plans erection of modern sawmill near Winnfield, probably at Gorhamtown, on the Tremont and Gulf railway operated by the Company; a planing mill and oak flooring plant also planned.

## MARYLAND

**BALTIMORE**—Improvements—Public Service Commission approved application of Baltimore Transit Co., to convert 17 rail lines to buses.

**BALTIMORE**—Addition—Albert F. Goetze, Inc., 2401 Sinclair Lane, let contract to Leland Construction Co., for addition, 1940-54 Belair Road; brick and steel, cost \$100,000; private plans.

**BALTIMORE**—Phone Center—August B. Hancke, Vice Pres. of Chesapeake and Potomac Telephone Co. of Baltimore City, announced that work is underway on \$4,000,000 telephone center on East Fayette St.; Consolidated Engineering Co., Contractors.

**BALTIMORE**—Building—Cummins-Hart Construction Co., 2023 N. Charles St., has contract for building, 541 Patapsco Ave., for Chesapeake and Potomac Telephone Co., \$22,000.

**BALTIMORE**—Building—Lever Brothers let contract to M. W. Kellogg Co., for masonry manufacturing building, 5300 Holabird Ave., cost \$81,000; masonry construction.

**BALTIMORE**—Improvements—Board of Estimates approved agreement between Baltimore Aviation Commission and Gas and Electric Co., for relocation of company's electric transmission line which now crosses site of proposed new airport at Friendship Church; estimated cost \$62,500.

**BALTIMORE**—Loading Platform—Continental Oil Co., Fairfield, will construct loading platform, 3441 Fairfield Road, at \$15,000.

**BALTIMORE**—Building—Good Humor Ice Cream Co., let contract to John K. Ruff Co., 100 W. 22nd St., for cold storage building, 2001-23 Windsor Ave., cost \$12,000.

**CURTIS BAY, STA. BALTIMORE**—Building—E. I. du Pont de Nemours & Co., Wilmington, Del., received bids for garage building.

**BALTIMORE**—Warehouse—H. B. Davis Co., let contract to Davis Construction Co., 9 W. Chase St., for warehouse, 1600 Bayard St., cost \$77,000.

**BALTIMORE COUNTY**—Shed—T. Robert Pann let contract to Omer L. Cullins, 920 Argonne Drive, for storage building.

**MOUNT WASHINGTON, IND. STA. BALTIMORE**—Building—Maryland Bolt & Nut Co., received bids for pickling building.

**OCEAN CITY**—Pipe Line—Eastern Shore Gas Corp., filed application with U. S. District Engineer, to lay gas mains across Sinepuxent Bay at Ocean City and by the Chesapeake and Potomac Telephone Co. to install cable in Choptank River.

**SPARROWS POINT, BR. BALTIMORE**—Plant—Delta Chemical Manufacturing Co., Baltimore has acquired oxygen plant at Sparrows Point from War Assets Administration.

**SPARROWS POINT, BR. BALTIMORE**—Buildings—Bethlehem Steel Co., Sparrows Point 19, has plans completed for roll shop, \$61,600; covered storage yard, \$60,750; filter building, \$15,300; treating building, \$4,200; pump house, \$1,000; roasting building, \$21,500; drying building, \$1,000; precipitation building, \$4,000; open shed, \$1,500; bagging building, \$2,200; train shed, \$2,000; addition to building, \$7,300; electrical shop, \$2,000; addition to building, \$8,000; coke ovens, \$30,000; runway, scale pits and pump house, \$40,000; line storage bin, \$1,300; coal storage bin, \$1,500; ore storage bin, \$1,300 and eight tanks, \$6,300; owner builds.

## MISSISSIPPI

**MISSISSIPPI**—Line—Morrison Brothers, Odessa, Tex., have contract for 23 miles of 26 inch loop line in Mississippi, for Tennessee Gas and Transmission Co.

**BASSFIELD**—Plant—Board of Supervisors of Jefferson Davis County, Prentiss, receiving bids for construction of proposed new hosiery factory building; Bassfield Knitting Mills received charter for incorporation; \$35,000 available.

**BAY SPRINGS**—Garment Plant—Board of Supervisors of Jasper County, let contract at \$90,000 to Roscoe Perry, Louin, for construction of new garment factory.

**BILOXI**—Building—Leonetti Motor Co., has CPA approval for construction of new building to be erected on south side of West Howard Avenue, foot of Caillavet Street, estimated to cost \$20,000.

**CORINTH**—Buildings—Corinth Flying Service plans airport; will include hangar building, which will contain classrooms, office space and lounge.

**CORINTH**—Newspaper Plant—Daily Corinthian, Foote St., let contract to J. Everett Meeks, for modern building which will house newspaper and Radio Station WCMA.

**DREW**—Garment Plant—J. A. Maxwell, Mayor, received low bid at \$60,339, from McNeese Construction Co., Commerce Title Bldg., Memphis, Tenn., for new one-story garment plant building.

**EUPORA**—Factory—City plans erection of \$118,500 garment plant to be leased by Eupora Company.

**HATTIESBURG**—Buildings—Board of Supervisors of Forrest County, let contract to Oden Construction Co., Inc., Hattiesburg, at \$13,338, for extensive repair and alteration work on South Mississippi Livestock show grounds buildings.

**HAZLEHURST**—Building—City has let contract to Central Construction Co., Philadelphia, Pa., at \$100,545, for construction of new factory building for Sanders Interests.

**JACKSON**—Radio Station—Peter J. Trollo, East Pearl St., Archt., received low bid at \$14,329, from E. & J. Construction Co., for new WLST radio transmitting station on Canton Rd.

**JACKSON**—Plant—Pepsi-Cola Bunch Beverage Co., Inc., has preliminary plans in progress for construction of new building.

**JACKSON**—Expansion—The Southern Bell Telephone and Telegraph Co., plans \$38,000, 600 five year expansion program.

**NATCHEZ**—Bus Station—Southern Bus Lines, Inc., let contract to T. F. Graves, Natchez, for construction of new one-story masonry and steel bus station building on Main Street, cost \$40,000.

**NEWTON**—Plant—Mayor and Board of Aldermen, let contract to O. & W. Construction Co., Memphis, Tenn., for construction of proposed new garment plant building.

**NEWTON**—Plant—Ford Ice Cream Co., J. F. Ford and J. P. Ford, Jr., have acquired 3 1/2 acre site on West Church Street for erection of one-story brick building for manufacture of ice cream; also a warehouse to be used for storage; new machinery purchased.

**WEST POINT**—Building—Farm Equipment Co., has plans in progress for construction of sales and service building, cost approximately \$50,000.

## MISSOURI

**KANSAS CITY**—Building—Bennett Construction Co., will construct one-story building, at 3261 Roanoke Road for Rutledge Oil Co.

**KANSAS CITY**—Business—Fixtures Manufacturing Corp., 312-14 Blue Ridge, incorporated with Arthur Gerber, Chicago, and Associates; to do general manufacturing business.

**KANSAS CITY**—Addition—Bird & Fletcher Co., L. J. Navran, President, Seventh and May Street, let contract to Morris Hoffman Contracting Co., 309-11 Victor Building, Kansas City 6, for construction of first unit of 2-story and basement building, southwest corner of Seventh and Central Streets; including new equipment will cost approximately \$650,000.

**KANSAS CITY**—Manufacture—R. L. Faubion Company, 2525 Southwest Blvd., incorporated with R. L. Faubion and Assoc.; manufacture and automobile, tractor and truck service station.

**KANSAS CITY**—Expansion—National Screen Service Corp., Louis Patz, 1706 Wyandotte Street, has acquired 6-story-and-basement building at southwest corner of Eighteenth Street and Baltimore Avenue; plans expanding \$20,000 for improvements.

**ST. LOUIS**—Silverware—Continental Silver Co., 705 Chestnut St., incorporated with Ben Eastman and Assoc.; to manufacture, process, buy, sell, distribute silverware and other metal products.

**ST. LOUIS**—Terminal—Burlington Transportation Co., T. L. James, Pres., 506 S. Wabash Ave., Chicago, Ill., has acquired site, Northwest corner of Broadway & Washington, for construction of bus terminal.

**ST. LOUIS**—Addition—St. Louis Diecasting Corp., 4528 Oleatha, started work on addition to warehouse; brick, concrete and steel.

**ST. LOUIS**—Printing Plant—South St. Louis Neighborhood News, 3900 S. Broadway, let contract Arthur R. Darr, 4976 Eichelberger, for printing plant, 4210 Chippewa St.

**ST. LOUIS**—Equipment—Ford Motor Co., let contract at \$3,000,000 to F. H. McGraw Co., for purchase and installation of new production equipment in a Ford assembly plant now under construction by Patrick Warren Construction Co.

**ST. LOUIS**—Factory—Majestic Manufacturing Co., 2134 Delmar Boulevard, let contract to L. O. Stocker Co., Arcade Building, for factory, 3900 Neosho Street.

**ST. LOUIS**—Alterations—Mallinckrodt Chemical Works, 3600 N. 2nd St., let contract to Dickie Construction Co., 317 N. 11th St., for replacing one-half of roof with precast concrete deck and built-up roofing, 201 Mallinckrodt St., cost \$60,000.

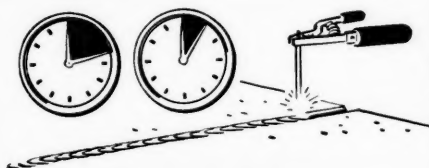
**ST. LOUIS**—Compressor House—Monsanto Chemical Co., 1700 S. 2nd St. let contract to Frin-Colon Contracting Co., 1706 Olive St., for one-story compressor house, concrete foundation, steel frame, pre-cast slab roof, at 113 West Russell; cost \$45,000.

(Continued on page 55)



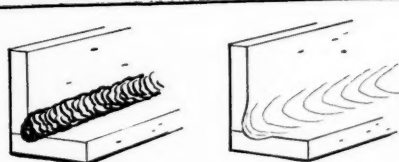
# FOR HIGH SPEED, HIGH QUALITY WELDING

## -USE



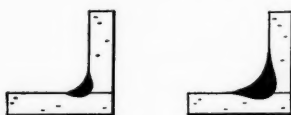
### GREATER SPEED

DH-2 is a really fast electrode — for more pounds of deposit per hour, less welding cost. It's easy to handle with minimum spatter loss.



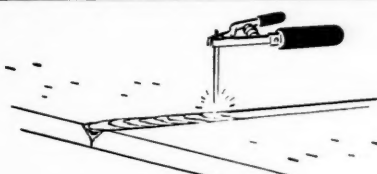
### BETTER APPEARANCE

Weld metal "feathers out" — neat and uniform. It eliminates notched effect along weld edge — improves product appearance.



### MEDIUM OR DEEP PENETRATION

If you desire medium penetration, you weld at normal amperages. You get deep penetration at high amperages.



### FOR DOWNHAND

DH-2 is a "specialist" — designed specifically for horizontal, flat fillet and groove welding — proved the country over.

"SM"

AWS  
E-6013

"FR"

AWS  
E-6012

"CM-50"

AWS  
E-7011

"FW"

AWS  
E-6020

"AC-3"

AWS  
E-6013

"PF"

AWS  
E-6012

"AC-1"

AWS  
E-6011

"AP"

AWS  
E-6010

# P&H

## WELDING ELECTRODES

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DH-2 is one of many types of P&H electrodes which meet every welding need. Above are just a few of the complete P&H mild steel group. Ask for complete line booklet R-7.

## AMERICA'S MOST COMPLETE ARC WELDING SERVICE



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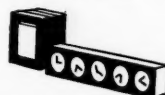
AC  
WELDERS



WELDING  
ELECTRODES



WELDING  
POSITIONERS



WELDING PRODUCTION  
CONTROL SYSTEMS



ELECTRIC  
HOISTS

★ ★ ★ ★ ★

# LITTLE GRAINS OF SAND

★ ★ ★ ★ ★

*"Little drops of water, little grains of sand,  
Make the mighty ocean, and the pleasant land."*

We are learning the hard way that in a representative democracy there is no place for laws favoring organized minorities. There is no place in America for special groups. The whole is composed of all of its parts. Everybody, or nobody should be "special."

It took a national meat famine to teach the great American public what every businessman knew a year ago. He saw then, and even the most obtuse see now, that bureaucratic bungling is bound to create confusion and economic inequalities. Shortages of goods cannot help but be the inevitable result. Let's get really mad about the lack of housing next.

There were approximately 37,000 women listed among the 87,622 holders of common and preferred stock in E. I. du Pont de Nemours & Company, Inc. on September 30th of this year. They are all part owners in this great company and depend, in part at least, on the profits—after taxes—that its management can earn and that their benevolent Uncle Sam will graciously permit it to retain for them. It seems as if we have "forgotten women" in our midst too.

To get more for the  
dollar you spend, give  
more for the dollar  
you earn.

Decades ago certain conscienceless business and industrial leaders acquired power because the government adopted a negative attitude toward their tactics. Until the passage of the Sherman Act it failed to check them. Government's attitude toward labor unions, however, has always been affirmative. It has actively assisted them to their present position of ruthless power. This assistance must not only be removed, but, also as in the case of business, a restraining curb must be applied.

Maneuvering under the smoke screen of professed welfare for the "common man" our federal government embraces many of the alien social and economic theories that have prostrated the European nations from which they came. It seeks to set aside the law of supply and demand, to interfere with the rules of free and fair competition, to foment unrest by stimulating economic warfare and artificially creating non-existent social classes. Even our highest courts, the bulwarks of all of our "freedoms" are given to rendering judgments based on reasons of expediency rather than on justice and equity.

An analysis of the current industrial expansion in Tennessee reveals a significant trend towards decentralization. Of the wide variety of new industries being established in the state during the first eight months of this year 91 are scattered throughout the state in 60 towns and cities most of which have populations under 5000. Contrasted with this, only 51 went to the four metropolitan areas of the State.

"The U. S. has 6% of the world's area and 7% of its people. It has 60% of the telephones, 80% of the motor cars, 35% of the world railroads. It produces 70% of the world's oil, 60% of wheat and cotton, 50% of copper and pig iron, 40% of coal and lead. It has eleven billion dollars in gold. It has two-thirds of the world's banking resources. The purchasing power of its people is greater than that of all the people of

Europe or all the people of Asia. Responsible leadership which cannot translate such a bulging economy into an assured prosperity is destitute of capacity. But pompous statesmen looking over the estate solemnly declare that the methods by which it was created are all wrong, ought to be abandoned, must be discarded, and that the time has come to substitute political management for individual initiative and supervision. There is only one way to characterize that proposal and

that is as just damn foolishness."

This quotation did not appear in the *NAM News*. It was written by the editor of the *London Sphere*.

In spite of Mr. Porter, the head of what is left of OPA, and Mr. Wyatt, of housing agency notoriety, observant men believe that federal controls are on their way out—and fast. The political strategy of the administration is to beat a hostile Congress to the punch and free everything possible within the next six months. Many people believe that even rent controls will be discarded before next June.

The Sherman Anti-Trust Act did not become law until after years of discussion and deliberation and after its passage it was liberally amended. While it is not perfect this law is the authority for a policy which the people of the nation approve, the preservation of business competition. In contrast, the Wagner Act ostensibly passed to encourage industrial peace between management and union labor, was rushed

(Continued on page 16)

# Measure Your STEEL SCRAP by the GOLDEN RULE



**THIS** is a special appeal to every steel fabricator! The steel industry needs scrap and needs it badly.

Please separate and ship your scrap according to its chemical composition. Let the user know what's in it, just as you expect to know what you're getting when you order new steel. Keep alloy turnings separate from carbon steel. Not only that, but for greatest usefulness to the mills, keep different types of alloy scrap in separate lots.

Greater care on the part of scrap producers will quickly help deliveries of new steel, as it will simplify and speed up use of scrap in the open hearth or electric furnace. All too fre-

quently, for example, scrap scheduled for a carbon heat has to be diverted because of high residual alloy content--production is thereby interfered with and delivery schedules delayed.

So segregate your scrap for better deliveries of the new steel you want from the mills.



## YOUNGSTOWN

THE YOUNGSTOWN SHEET AND TUBE COMPANY

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Export Offices - 500 Fifth Avenue, New York City

Manufacturers of

CARBON - ALLOY AND YOLOI STEELS

Pipe and Tubular Products - Sheets - Plates - Conduit -  
Bars - Electrolytic Tin Plate - Coke Tin Plate - Rods - Wire -  
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*The Sign Of  
Quality!*

## VALVES HYDRANTS

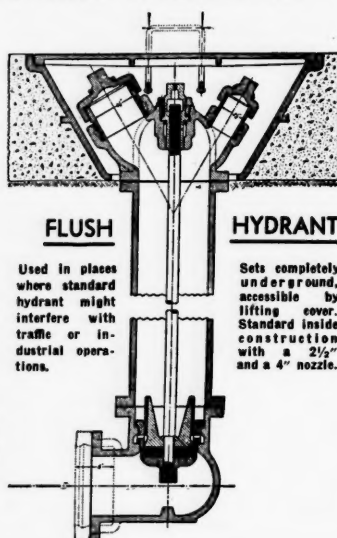
and pipe line accessories



Gate Valve



Check Valve



**FLUSH**

Used in places where standard hydrant might interfere with traffic or industrial operations.

**HYDRANT**

Sets completely underground, accessible by lifting cover. Standard inside construction with a 2 1/2" and a 4" nozzle.

M & H GATE VALVES are cast iron body, bronze mounted, with double-disc parallel seat or solid wedge type, non-rising stem or outside screw yoke. They come either with flanged or screwed connections. Valves for fire protection lines are marked "UA-FM" to denote approval of both the Underwriters and the Factory mutuals.

M & H FIRE HYDRANTS are revolving head, dry top, bronze mounted. They also are approved by "UA-FM". Entire main valve assembly is removable through barrel without digging. Special Traffic Model is fitted with breakable bolts and stem coupling, designed to break at ground under impact. Repairs are made simply by renewing bolts and coupling, without shutting off the water.

### M & H PRODUCTS INCLUDE

FIRE HYDRANTS  
GATE VALVES  
TAPPING VALVES  
WALL CASTINGS  
SPECIAL CASTINGS  
TAPPING SLEEVES  
CHECK VALVES  
FLOOR STANDS  
EXTENSION STEMS

SHEAR GATES  
MUD VALVES  
VALVE BOXES  
FLAP VALVES  
SLUDGE SHOES  
FLANGE AND  
FLARE FITTINGS  
FLANGED FITTINGS  
B & S FITTINGS  
CUTTING-IN TEES

## M & H VALVE AND FITTINGS COMPANY

ANNISTON, ALABAMA

(Continued from page 12)

through Congress without adequate consideration and debate and its glaring faults have not been corrected by amendment in the ten years since its enactment. Public opinion now, belatedly recognizes this legal monstrosity, made constitutional by subterfuge and chicanery, as the root of the noxious weed of industrial strife.

It is politically fashionable to say that labor should not be subject to competition from large numbers of unemployed in its own ranks. The fact remains, however, that because human nature is what it is, a little competition is a good thing for everyone, labor as well as business. Experience with both labor and prices during the past year is ample evidence of what happens when bidding for manpower and materials becomes too one sided because of a shortage of supply.

"The South could be brought out of the red in 10 years with the energy it now wastes Dr. Harold L. Trigg, associate director of the Southern Regional Council, told an interracial forum meeting at Trinity Parish House this afternoon." This quotation from the *Spartanburg Herald* intrigues us as does also the following gem from Dr. Trigg's mind: "there are more good people than bad in the South." It is evident that Dr. Trigg is a brilliant observer and student of Southern economy and morality.

The Federal Deposit Insurance Corporation has come a long way and traveled an easy and profitable road since it was established. Although this corporation has only been functioning thirteen years, it has built up a surplus of more than \$700,000,000. Isn't the time ripe for consideration of repayment of the original capital of \$289,000,000 provided by Congress? If it could start with a capital of less than three hundred million in "parlous" times, certainly four hundred million should amply suffice as present working capital.

Practical minded people are agreed on one premise—taxation should be imposed for no other purpose than the raising of revenue. Taxes levied for any other purpose leave the way open for all sorts of fantastic schemes, of which the "share the wealth" is probably the most hairbrained. Perfectly honest, sincere people may recommend taxation to redistribute wealth, but once they have admitted that the taxing power may be used otherwise than to support the government, they have no kick coming if and when it is used to injure them.

According to Walter S. Tower, president of the American Iron and Steel Institute strikes in steel plants, coal mines and other industries, and shortages of raw materials, have prevented more than 12,000,000

(Continued on page 22)





### Said One Industrialist to Another:

"Take my tip, Bill... 'Look Ahead—Look South.' No other section of the country offers greater opportunities. It has the resources, markets, manpower... everything any business needs to grow and prosper."

The advantages the Southland offers industry are nothing new to far-sighted businessmen. They've already put thousands of busy factories in the territory served by the Southern Railway System. And hundreds more are on the way.

"I'm locating in the South for mighty convincing reasons," says one industrialist to the other.

"Look Ahead—Look South."

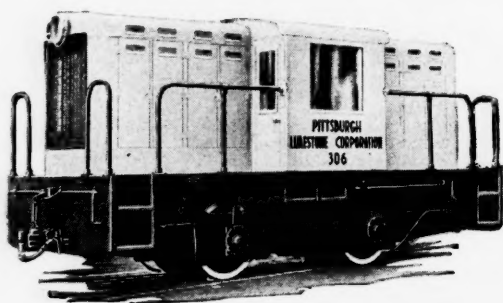
*Ernest E. Harris*  
President



## SOUTHERN RAILWAY SYSTEM

*The Southern Serves the South*

# FITTED POWER Gives Best Results



Industrial haulage is no exception. Every rail operation is different. Length and frequency of trips; grades, curves, condition of rails; condition and kind of cars; size of loads—all these are pertinent and can lead to but one conclusion: For best results your haulage power unit should be **FITTED** to your particular haulage operation.

## We Help You to KNOW



**Better-Built  
DAVENPORTS  
are AVAILABLE in  
STEAM  
GASOLINE  
DIESEL  
with  
ELECTRIC  
or  
MECHANICAL  
DRIVE**

Our engineers have prepared a new Haulage Survey Data Sheet which you can use to prepare an accurate and complete description of your rail conditions, rolling stock used, and work to be done. Send us this description and we will tell you exactly the most suitable size and type of locomotive best suited to **YOUR** requirements. There's no obligation.



**Write for  
SURVEY DATA  
SHEET TODAY.**

Export Office: **BROWN & SITES CO., INC.**  
50 Church St., New York Cable Address "BROSITES"

**DAVENPORT LOCOMOTIVE WORKS**  
A DIVISION OF DAVENPORT BESLER CORPORATION, DAVENPORT, IOWA

(Continued from page 16)

tons of finished steel from reaching the market this year. "The month-long steel strike in January-February of this year resulted in a loss of more than 6,000,000 tons of finished steel," said Mr. Tower. "Hardly had the mills got back into stride when the nationwide coal strike caused a direct loss of over 3,500,000 tons more of finished steel. Since then production has continued to be hampered by a series of small strikes as well as by shortages of scrap and other raw materials."

Attorney-General Tom Watson of Florida declared the anti-closed shop amendment of that state enforceable in view of the fact that the United States Supreme Court refused to declare it unconstitutional as it was urged to do by the labor unions. This amendment to the Florida Constitution was passed by popular vote in November 1944. After its validity was upheld by the Federal District Court of that State it was appealed by labor unions to the Supreme Court which, by a 6 to 2 vote sent it back to Florida courts for decision. Pending further litigation the Florida authorities intend to enforce it as law.

You too will agree with Samuel Pettingill when he says: "I really would vote for one project. That is to put a Sears-Roebuck or Montgomery Ward catalogue—in the Russian language—in every home in Russia. Why, they would be so busy reading it, they'd never have time to think of war. In fact, I reckon a glance at that washing machine or egg hatcher or baseball mit or ladies' nightie would make them so peeved with Stalin that he wouldn't dare take his usual noon day walk down Moscow's main street."

The Association of Catholic Trade Unionists which is waging a battle to eliminate communistic influence from trade unionism is undoubtedly well informed as to the extent of this influence. Its organ *The Wage Earner* lists the following CIO unions as radical, "nearly all of them Communist dominated organizations."

Mine, Mill & Smelter Workers; American Communications Association; United Electrical Workers; Farm Equipment Workers; Food, Tobacco & Allied Workers; Fur & Leather Workers; Furniture Workers; Inland Boatmen; Longshoremen; United Office & Professional; United Public Workers; Transport Workers' Union; Fishermen; Marine Cooks & Stewards; National Maritime Union.

The fact that the Communist Party in the United States claims some 100,000 members has lulled many Americans into a feeling of false complacency. I would not be concerned if we were dealing with only 100,000 Communists. The Communists themselves boast that for every Party member there are ten others ready to do the Party's work. These include

(Continued on page 24)

**MILLIONS  
to Serve You.**



**74,079,019 ARE IN USE ON THE N & W TODAY**

Powerful steam locomotives; sleek, streamlined coaches; sturdy freight cars, and glistening rails that stretch many thousands of miles . . . north, south, east and west . . . to bind America together . . . these things are railroading . . . to most of us. But ask the "old timers" who build the tracks and run the trains. They will remind you of a multitude of "little" things. Like railroad spikes . . . 7 3/16 inches long, 5/8 of an inch square . . . so inconspicuous they almost completely escape public notice. They will tell you that these spikes are carefully forged of sturdiest steel; are minutely inspected and expertly driven into the crossties to anchor and hold fast the strong rails over which heavy freights and deluxe streamliners speed safely day and night.

In good railroading, the big, obvious elements are important. But the thousands

of "little" things, counted in the millions, such as spikes, are just as vital.

Lay the spikes now in use on the N. & W. end-to-end and they will reach from Norfolk to the South Pole, or from Cincinnati to Ceylon.

However small a single piece of railway equipment may seem, it, with other small pieces, plays a big part in the railway's job . . . *to Serve You.*

**Norfolk  
and Western  
RAILWAY**

**PRECISION TRANSPORTATION**



## This Is MARION, INDIANA

### Another 100% Layne City

—Marion, a busy, progressive and forward looking city of east central Indiana gets its entire water supply from Layne Well Water Systems. And taking a tip from the city are a brewery, a food processing plant, a radio and television station, two meat packers, a military home, a wire and rubber manufacturer, a glass company, a laundry and a wire and cable company—all of whom have their own individual Layne Water System plants.

—Seldom does an industrial product enjoy such dominating preference as is accorded to Layne Well Water Systems by Marion City and Factory executives. Such preference was earned through recognized reputation of superior quality and basically sound operation economy.

—Layne Well Water Systems are known to be the best that specialized engineering research can produce—and the best that American dollars can buy. For late catalogs and illustrated literature, address Layne & Bowler, Inc., General Offices, Memphis 8, Tenn.

### HIGHEST EFFICIENCY

*Layne Vertical Turbine Pumps are available in sizes to produce from 40 to 16,000 gallons of water per minute. High efficiency saves on power cost.*

**AFFILIATED COMPANIES:** Layne-Arkansas Co., Stuttgart, Ark. \* Layne-Atlantic Co., Norfolk, Va. \* Layne-Central Co., Memphis, Tenn. \* Layne-Northern Co., Mishawaka, Ind. \* Layne-Louisiana Co., Lake Charles, La. \* Louisiana Well Co., Monroe, La. \* Layne-New York Co., New York City \* Layne-Northwest Co., Milwaukee, Wis. \* Layne-Ohio Co., Columbus, Ohio \* Layne-Pacific, Inc., Seattle, Wash. \* Layne-Texas Co., Houston, Texas \* Layne-Western Co., Kansas City, Mo. \* Layne-Western Co. of Minnesota, Minneapolis, Minn. \* International Water Supply Ltd., London, Ontario, Canada \* Layne-Hispano Americana, S. A., Mexico, D. F.



## WELL WATER SYSTEMS VERTICAL TURBINE PUMPS

(Continued from page 27)

their satellites, their fellow-travelers and their so-called progressive and phony liberal allies. They have maneuvered themselves into positions where a few Communists control the destinies of hundreds who are either willing to be led or have been duped into obeying the dictates of others."

*J. Edgar Hoover*

A full 90 per cent of the increased cost of building is attributable to labor and government states James R. Edmunds, Jr., president of the American Institute of Architects.

"The government has contributed to our higher costs through higher taxes and inept efforts to control the economy and the construction industry which have reduced materials production and encouraged work stoppages," Edmunds said.

"Labor has contributed the greater share of the increased cost through higher wage levels all along the line, through its own reduced productivity, and through strikes in the building industry and in related industries.

"I do not refer alone to the wages paid on the building site. Those are not the only wage increases which affect the cost of building. We must take into account also the higher wages being paid in the mines and quarries, in manufacturing and transporting building products, and in the production of raw materials and supplies used in the manufacture of building materials and equipment.

"Thus, it is the nation's labor force, which so eagerly awaits new homes, that is largely responsible for the high costs of providing these homes. That is an inescapable fact."

Every administration has its people who seem to pop up out of nowhere—and usually are destined to return there—but the New Deal always seemed to have more than its share. It was inevitable that these people should grow too big for their trousers and finally depart. It was equally inevitable that when they departed they would disappear from the public prints. The realization apparently pains some of them grievously and they wish to do something about it. So they issue statements which no one prints, they get radio contracts to the disappointment of their sponsors and to the boredom of the listeners and finally they join associations and tell each other how the world is to be saved.

We wish to suggest that if these people are as wise and important as they seem to think, the thing to do is to run for office. If they represent, as they claim, the real interests of the great mass of the people, then they have only to show the people and they will be returned to those pinnacles the atmosphere of which they so obviously enjoyed.

*Wall Street Journal*

What you lend is lost; when you ask for it back, you may find a friend made an enemy by your kindness. If you begin to press him further, you have the choice of two things—either to lose your loan or your friend.

*Platus*

Ren  
a great  
to live. I  
... an  
suitable  
accessibl  
markets.

MAIL  
State of  
554 Co  
Tallaha  
Please  
Name  
Street a  
City



*this is* **FLORIDA**



Come to Florida this winter! As long as you live, you'll remember . . . lazy hours of relaxation on broad, white beaches . . . swimming in the sun-warmed surf . . . dancing in the moonlight . . . day after sunshiny day of golfing, fishing and healthful outdoor recreation. You'll recall interesting days of sightseeing, and the thrills of Florida's exciting spectator sports. Forever bright in your memory will be the fun-filled hours of your carefree holiday, the palms and pines, the flowers and blue waters. Plan now—for this Florida winter you'll always remember.

**As long as you live you'll remember  
your Winter in FLORIDA**

*and so is* **THIS**



Remember this, too, about Florida. It is not only a great place to play but a great place to work and to live. Industry will find many advantages in Florida . . . an abundance and variety of raw materials, suitable plant sites with plenty of room for expansion, accessible to growing domestic and Latin American markets. Substantial savings in plant construction and

operation, sensible tax laws, and good working weather through the year. Employee morale is high, because Florida is a land of happier, healthier living.

Plan a longer vacation in Florida this winter. Investigate the profit advantages of Florida for your industry or business . . . it may pay dividends far beyond your expectations.

MAIL THIS COUPON TODAY!

State of Florida,  
554 Commission Building  
Tallahassee, Florida

Please send me colorful Florida booklet.

Name \_\_\_\_\_

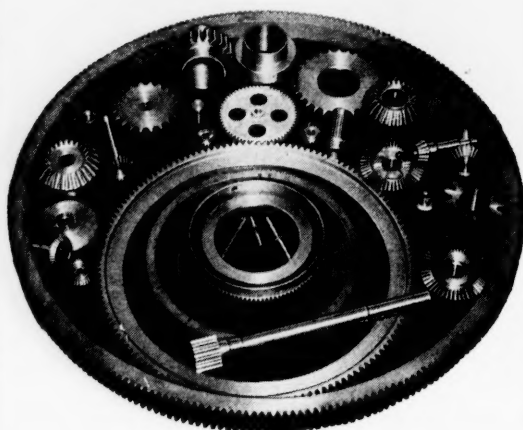
Street and No. \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

**FLORIDA**  
**THE SUNSHINE STATE**

# GEARS

## IN GREAT VARIETY



You will recognize the precision gears pictured above in wide variety . . . from the 36-inch ring gear for gun turrets to the tiny camera-operating gears. Between these are aileron "flipper" gears, bomb bay mechanisms and cargo hoist gears. ALL made for accuracy and durability by SLAYSMAN. Our industrial gear manufacturing facilities have been greatly increased to supply the demand for our varied services. A newly instituted Slaysman service is that of aeronautical gearing and transmission . . . bringing you the newest designs in WIDE VARIETY.

Let us hear from you.  
We'll be glad to help  
you with your power  
transmission problems.

## THE SLAYSMAN CO.

Established 1885 • Incorporated 1937

ENGINEERS • MACHINISTS

**MANUFACTURERS of INDUSTRIAL GEARS**

**801-813 E. PRATT STREET**

**BALTIMORE 2**

**MARYLAND**

## UNIONIZED MANAGEMENT

The National Labor Relations Board put the finishing touches to a well-planned and carefully worked-out program to give Wagner Act protection to supervisory employees. All levels of supervision in all types of industries are covered under a recent decision. It holds that store managers, employed by the Great Atlantic and Pacific Tea Company, constitute an appropriate unit for collective bargaining and that the employer must recognize their union and bargain with it.

It was admitted by the Board that these store managers exercise managerial authority and are policy-making employees. Their authority includes the right to (1) hire and discharge all employees; (2) determine rates of pay, vacations, hours, and conditions of employment; (3) determine the merchandising policies of the store; and (4) exercise general operational activities of the store which they manage. Yet the board held that inasmuch as their managerial authority is limited only to the store which they managed, and they do not exercise overall authority and policy-making functions with respect to all the company's nation-wide operations, they must be considered employees under the Wagner Act.

We have now reached the place where only top executives are considered a part of management. NLRB decisions now give bargaining rights to plant superintendents, and other high levels of executives, and would seem to exclude only those few officials of a company who make the overall policies for the entire company.

The matter is still pending. Ordinarily in precedent-making policy decisions such as this one, the question of extending the application of the principle involved in the decision would wait for a final judicial ruling. Not so with NLRB. Feeling confident that the courts will finally sustain them in their drive to bring management under the Wagner Act, they have, pending such determination, built up a pattern for the unionization of management.

We do not profess to know what is in the mind of the Supreme Court, yet we freely predict that when its ruling is finally made, it will be in favor of NLRB. Courts have rather consistently upheld the Board in its extension of this law. To those who believe that management cannot bargain with itself, it looks like the only hope lies with Congress. The Wagner Act should be amended to exclude supervisory employees. The ill-fated Case Bill contained such a provision along with some other features which would have corrected a number of abuses in our labor laws and their administration.

*Bulletin of Organized Business, Inc.  
of South Carolina*

We once believed in this country that the individual's economic condition was his own affair, and that the only function of government was to see that the rules of fair play were not violated.

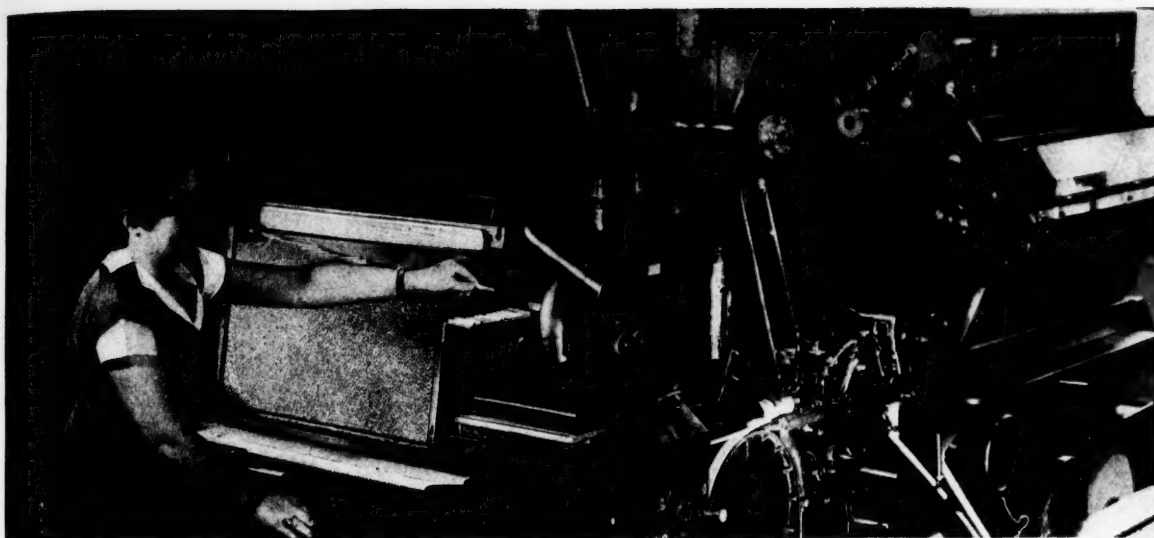


Photo: H. J. Reynolds Tobacco Co.

AT WORK ON ONE OF THE NUMEROUS MACHINES PRODUCING AN ENDLESS CHAIN OF CIGARETTES TO MEET THE DEMAND OF SMOKERS THROUGHOUT THE WORLD.

## THE SOUTH'S MANUFACTURING PROGRESS BASED ON ITS ABUNDANT NATURAL RESOURCES

That basic wealth and genuine prosperity are deeply rooted in the soil, is demonstrated by the growth of the tobacco industry, started by our early English settlers.

Of the tobacco acreage harvested in the United States, the South accounts for 92.4% from the following states:

North Carolina	689,000	Maryland	40,200
Kentucky	388,600	Florida	21,600
Virginia	135,400	Missouri	7,000
South Carolina	112,000	West Virginia	3,000
Tennessee	110,100	Alabama	400
Georgia	93,700	Louisiana	400

The 1944 total for these states is 1,601,400 acres. The tobacco crop harvested in 1944 from the above acreage was 1,789,151,000 pounds or 91% of the entire nation's tobacco crop.

The South grows much of the better grade, more expensive leaf tobacco required for cigarettes and leads the world in their manufacture. The South has the world's largest cigarette factory. North Carolina and Vir-

## TOBACCO

ginia alone account for about three-fourths of our national production.

In 1944, the manufacture of cigarettes required 920 million pounds of leaf tobacco, or 16 times that required in 1913.

During war years, the number of cigarettes produced by this country increased enormously, reaching nearly 332 billions in 1945, and for the following calendar years, the production figures for cigarettes weighing not more than three pounds per thousand (mainly standard length), were as follows:

1940—189,371,258,171	1943—296,173,332,638
1941—217,934,924,732	1944—323,583,887,771
1942—257,520,862,826	1945—332,000,000,000

The tobacco industry requires a vast amount of automatic production and packaging machinery, paper for wrappings, merchandising and shipping, and nearly 50,000 workers.

Many new manufacturing plants, branches and extensions being established in the South are influenced directly or indirectly by the editorials, articles and advertisements in this publication. They create sales opportunities for manufacturers of the nation, no matter where located.

Its advertising pages offer an exceptional opportunity to manufacturers prepared to supply the needed machinery, plant equipment, power and base materials.

## MANUFACTURERS RECORD

BALTIMORE 3, MARYLAND

NEW YORK

CHICAGO

CHARLOTTE

CLEVELAND

WHAT ENRICHES THE SOUTH ENRICHES THE NATION

NOVEMBER NINETEEN FORTY-SIX



## YEARS OF EXPERIENCE ARE BUILT INTO THIS LOCOMOTIVE

Each passing year brings improvements in design, construction or material used in Whitcomb locomotives. Suggestions from a user may lead to better visibility or a more convenient arrangement of controls and less fatigue for the operator. A new metal is born, and if it meets our requirements more accurately it is immediately designed into the next job. Constantly, our Engineering and Research Departments are striving to produce locomotives that will move more tons, in less time at lower costs per mile.

Typical of the results from these far reaching policies is the 50-ton Diesel electric illustrated. Pound for pound there is more locomotive built into this Whitcomb work horse than in many others, without the Whitcomb name plate, that are tons heavier. Ask about its remarkable tractive effort performance in speed ranges up to 40 MPH.

**Other Diesel Electrics  
For Industrial Service  
Up To 95 Tons**

**The Whitcomb Locomotive Co.**

*(Subsidiary of The Baldwin Locomotive Works)*

**Rochelle, Illinois**

## AMERICAN INGENUITY

Cattle play an important part in satisfying the needs of foot gear as well as appetites, and so the shoe industry became almost as hungry for steer products as did the consumer of steaks. The shoe industry, however, refused to starve. Instead, it experimented with the idea of some substitute for cow hides in the structure of footwear. The results have been little short of amazing, and can be said to practically eliminate future dependence on leather as a prerequisite in the manufacture of shoes.

Tried out by the shoe industry were treated fabrics, flexible woods, plastics, and finally soya bean in combination with pulverized walnut shells and sawdust. While none of these are likely to be seized upon by meat eaters as the answer to their prayers, the last named combination appears to be just what the shoe industry needed.

Reports from the industry are highly enthusiastic, little short of elated. Shoe manufacturers even go so far as to assert they can now say "nuts" to the O.P.A. Over seventy-five million pairs of soya bean soles are said to have been made up to now, with sufficient productive capacity in this country to meet every shoe requirement. And, in answer to natural questions which will arise about quality and durability, in comparison with leather, these synthetic soles have been worn and tested by the American people, and have apparently been found to possess not only all the qualities of leather but new advantages as well.

What has been done for soling of shoes is in the making for uppers. Materials turned out by shoe factory laboratories for uppers look in every way like the finest leathers and promise to outwear any uppers now made. Present factory equipment can only meet the sole demand, but procurement of additional facilities should see production in full supply of all-soya-bean shoes, more durable and flexible than leather, with consequent better service to wearers.

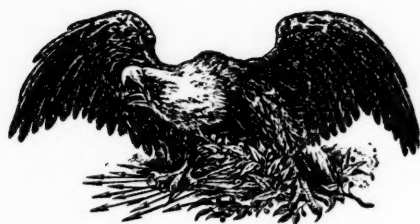
One of the most interesting features of the new material is that it can be derived from virtually waste products. Equally interesting is the fact that completion of the discovery came just at the right time. The present rush to slaughter of steers does not mean that either steaks or hides will be in prewar supply overnight. Normal processes of curing and tanning require three to five months, even if the supply were sufficient to meet all demand. Inventories of leather in the hands of manufacturers and tanners are now just about depleted.

The shoe industry has demonstrated that the America that won the war through its ingenuity can likewise come through in peacetime performance.

If the true spark of religious and civil liberty be kindled, it will burn. Human agency cannot extinguish it. Like the earth's central fire, it may be smothered for a time; the ocean may overwhelm it; mountains may press it down; but its inherent and unconquerable force will heave both the ocean and the land, and at some time or other, in some place or other, the volcano will break out and flame up to heaven.

—Daniel Webster





*"What Enriches the South Enriches the Nation"*

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## STATISTICAL SLEIGHT OF HAND

There was a time within the memories of most of us when government statistics were accepted as "law and the gospel." They were carefully gathered and compiled by honest, painstaking men for purposes of information only. They were made public for the use of all citizens and for their individual interpretation.

Today that situation has changed. Public confidence in the honesty of Federal statistical agencies has been seriously undermined, and the moral integrity of some of the personnel of those agencies either doubted or condemned.

Tools of pressure groups or dupes of subversive interests have been permitted or even encouraged to worm their way into positions of confidence where they can twist and distort true figures to serve selfish or malicious ends. This is a serious situation which cries aloud for correction.

Accurate statistics are the soil from which intelligent thinking and planning grow. Inaccurate or distorted figures foster the propaganda of demagogues and make victims of those whom they mislead. They are insidious poison to a democracy.

To recall to mind just one example that illustrates our national danger: a year ago, based on what were alleged to be analyses prepared by the Department of Commerce, President Truman was influenced to advocate a policy of wage increases with price rigidity. Business men were stunned, and the President and the public were soon disillusioned.

Both false hopes and groundless threats and fears can be germinated in the public mind by the falsification of data which they accept as reliable. Statisticians should not be protagonists. Mental legerdemain should not be one of their attributes.

The people of the United States have the right to expect and demand absolute integrity from the men and women who furnish them with the source material on which their opinions are formed and their judgments and decisions made. The unfortunate fact that "figures don't lie but liars do figure" is just as true today as when it was first said. It is the duty of our elected representatives to protect us from the machinations of such liars.

A first duty of our newly elected Congress is an investigation and house cleaning of the government's statistical agencies, the roots of public information.

## LAND OF FULFILLMENT

In order to accelerate and facilitate economic growth, individual communities and sections throughout the South need cooperation between industries whose productions supplement each other. This indisputable fact is constantly kept fresh in the minds of the staff of the MANUFACTURERS RECORD by the continuing stream of inquiries that reach our desks. The following paragraph from a letter from the general industrial agent of the Southern Railway System is a recent case in point:

"There are several stove factories that would like to move into the South if they could have the sheet metal enameled at some near point but they will not move if it is necessary to have this work done in the North and shipped to them. If you know of any place where this might be done, I would appreciate your giving me the address."

For generations the MANUFACTURERS RECORD has helped to bring together manufacturers whose wants and services were mutually beneficial. We have served as a clearing house for the collection and dissemination of all kinds of industrial information of value to individual businesses interested in working with us in the cause of Southern industrial progress. In this we have been greatly aided by the interest and intelligent cooperation given us by the industrial departments of the railroads and public utilities and the assistance of the wide-awake local Chambers of Commerce.

We know, just as every reader of the RECORD knows, that the coming economic and cultural development of the South depends, in large measure, upon the conversion of its great natural resources into finished products right in "its own backyard." Henry Grady's and Richard Edmonds' may have been voices crying in the wilderness years ago. But today their wilderness has become the land of promise and, please God, the tomorrows will make it the land of fulfillment.

## RUBBER DILEMMA

International control of natural rubber ends December 31st. This poses an immediate economic problem that is of particular importance to the South because of its vast war-created synthetic rubber industry.

According to reliable forecasts the production of natural rubber in the Far East during 1947 will approximate that of 1941, in spite of small anticipated deliveries from Sumatra. It is true that political turmoil in the Dutch Indies may interfere with shipments from those islands, but this is a possibility that is far from probable. In short, competent men believe that world production of crude rubber will be in excess of 1,000,000 tons next year. This, together with the output of synthetic rubber in the United States, will change the present shortage into a buyers' market.

The South, as not only the core but also almost the whole of the synthetic rubber industry, has a vital interest, and should take the leading part, in the formation of a national policy that will determine

the future of domestic synthetic rubber. It is not our purpose to attempt to solve this problem here. We merely wish to point it out to informed and thoughtful men who are capable of solving it.

The market price of natural versus synthetic rubber, duly weighted as to the end use value of each, is a fundamental factor to be considered. If natural rubber will cost more than synthetic and if its quality for most uses is inferior, then there will be no problem at all. This, however, is not apt to be the case in the near future. Therefore it is safe to assume that in a free world market natural rubber will be able to undersell its artificial brother and destroy him.

If, for governmental reasons of national safety or for economic reasons of regional welfare, the unrestricted forces of world competition need to be curbed, the manner of their curbing is of vital importance right now.

Shall we map a course that is based on a continuation of bureaucratic war-born controls based on end-use?

Shall we pauperize the synthetic rubber industry with government subsidies at the taxpayers' expense?

Or shall we increase prices of commodities to consumers by adopting a protective tariff?

It seems as though we are on the horns of a dilemma, doesn't it? It may prove to be essential to protect national safety and regional welfare. Let's face our responsibility. Now is the time, lest by inaction, we permit foreign governments to shape our policies for us.

## A STATE RIGHT

One of the last remaining of our rapidly vanishing states' rights is the right to determine qualification for voters. The Constitution—that broad foundation of our government on which Washington's termites have been feasting for so long—specifically tells us that eligibility in each state to vote in national elections shall be the same as the eligibility requirements to vote for electors of the most numerous house of the state legislature.

When the federal government tries to ram an anti-poll tax law down the throats of the various states which see fit not to have such a law, it is acting in direct opposition to Article I, Section II of the Constitution, mentioned above.

For the first time in our history, eighteen-year-olds are permitted to vote; the state of Georgia has made them eligible. No federal opposition was raised. In fact, President Truman has stated that he approves eighteen-year-olds being given the franchise and that he hopes *the various state will see fit to do so*. Such a moderate and just approach to the problem is a far cry from the frantic efforts to deprive any of the several states of a right reserved to them by the Constitution.

We express no opinion on the pros and cons of poll taxes. We believe, however, that if a state wants a poll tax, then that state should have it, without federal interference, just as we believe in Georgia's right to enfranchise eighteen-year-olds if she so desires.

# THE REAL SOUTH

by

**Thurman Sensing**

*Director of Research*

*Southern States Industrial Council*

**M**ORE than ever it seems to be popular these days for news columnists and writers of magazine articles to "discover" or "look" at the South, to analyze it, to criticize it, to take it apart and put it back together to their own satisfaction. As a group, these writers must be using glasses of a strange hue, because with all their discovering, they do not find the real South, the South that was discovered long ago by all real Southerners. With all their looking, they do not seem to see the South that these real Southerners have been building back into prosperity since that terrible period eighty years ago when the economy of the region was almost destroyed by a tragic and devastating war. From such writings, the nation will never get a portrayal of the real South as the Southern people know it, yet it seems to be difficult, if not impossible, to get the region nationally in any other light.

It is the fashion to treat the South as a "problem child" that is told, as a matter of habit, to stop doing whatever it is doing. "Don't segregate the Negro; don't oppose FEPC; don't elect Bilbo and Tammadge; don't oppose government subsidies for education; don't vote a solid South; don't object to the purging of your Congressmen; don't oppose the unionization of Southern labor." It would be small wonder that a person, going only by what he reads, should get the impression that the South does everything wrong! The Southern people are given no credit by these admonishers for being able to decide what they, themselves want—what is best for the South.

Yet as uniform as the writers are in criticizing and condemning the South, they are contradictory in their position. For a long time now Southerners have been told not to keep fighting the Civil War and not to continue viewing their affairs on a regional basis. And yet most of the material we read about the South these days is derogatory and critical of certain aspects of Southern life and economy that resulted directly from the Civil War; most of the writers single out the South

as a region with problems distinctly its own rather than as an integral part of the nation. Yet effects cannot be separated from causes. The South should not be told to forget the Civil War and at the same time be "be-littled" for its lower-than-average per capita wealth and per capita income. There was a time, in 1860 to be exact, when the South had more than its share of the national wealth. In that year, with one-third the nation's people, the South owned thirty-nine percent of the nation's wealth. Yet by 1870, this share had been reduced to fourteen percent. The South's invested capital, in large part, had been wiped out, its land ravaged, its property destroyed, its manpower killed. And there was no Lend Lease or United Nations Relief and Rehabilitation Administration to help the South in those days! The South has had to work its way back to prosperity the best way it could; it has done so, to its present extent, through the sheer grit, courage, determination, and hard work of its people.

Small wonder, then, that the South, which still contains one-third the nation's people, has a per capita wealth and a per capita income still below the national average. The gap is rapidly closing, however, and it was entirely unjustified a few years ago for a supposedly learned committee to report to the President that the South was the Nation's Economic Problem Number One, because it simply was not true. Such a report would have been true eighty years before, but no one outside the South was interested then.

The committee making this report should have considered the current rate of progress in the South at the time they were making their study instead of the static position of the South as compared with the nation. They would have found that the South was progressing economically at a much faster rate than the na-

tion at large; they would have found that the South now holds twenty-five percent of the national wealth, that the per capita income in the South is now seventy percent of the national average, that the South is now producing twenty percent of the nation's manufactured products compared with fifteen percent a few years previous and that the rate is constantly rising, that employment in the South increased during the 1930's while that of the nation was decreasing, that bank deposits in the South since 1900 have increased 2400 percent compared with an increase of 1000 percent for the nation. They would have found many other items indicating that the South was making progress faster than the nation at large, and that the gap between the Southern and national averages was becoming smaller and smaller.

In fact, if this committee had cared to look into the future, they could well have told the nation that the South was destined to achieve the soundest and most enduring prosperity of any region of the country, that the South contains all the necessary assets in natural resources, minerals, forests, land, climate, people, waterpower, and otherwise to attain such prosperity, and that it was rapidly doing so.

This report, however, was not just an economic report on the South as might have been indicated on the surface. It went beyond that to represent an attitude on the part of certain elements in this country toward the South, an attitude that has undoubtedly colored a good deal of the writing about the South.

In plain words, this attitude toward the South is taken and encouraged by those who believe in a regimented, centralized, bureaucratic government rather than in our traditional constitutional democracy, by those who realize that the South is the greatest stronghold of democracy left in the land and who at the same time realize that so long as the South continues to believe in and adhere to the fundamental principles of democracy on which this government of ours is based and

*(Continued on next page)*



## The Real South

(Continued from preceding page)

under which its people have prospered there is no chance for them to gain the control they desire.

From the pure economic viewpoint, these forces simply seized upon the fact that the South was not as able financially to provide certain facilities for its people as the nation at large. They therefore proposed that the only solution was for the nation to step in and subsidize the South in its efforts along these lines, knowing full well that once the South accepted these subsidies it would have relinquished forever control over its own affairs to a central government not in the least interested in the distinctive problems of the South as a region. Fortunately, the South has not yet been deluded to the extent that it has been willing to "sell its birthright for a mess of pottage."

But this attitude toward the South goes much farther than the economic view; these forces attack the South from all angles of the compass, — political, sociological, and otherwise. All these efforts, however, are simply part and parcel of the same scheme—to undermine the South as the stronghold of democracy. If they succeed, we shall no longer have the America that our forefathers created for us and which we ourselves have known. It is high time the people of this whole nation wake up to this fact; it is high time they learn about the real South and not the South portrayed by its traducers from the outside, and its betrayers from the inside.

Even the real people of the South, however, might wonder, if they have not given the matter much thought, why it is that they see the South the target of so much adverse comment in national magazines and newspaper columns outside the region, why the South receives so much commiseration because of its election of certain public officials even though these officials were regularly elected by majority ballot of the Southern voters, why so many Southern Congressmen are singled out for "purging" even though they are voting in accordance with the desires of their constituency, why the CIO-PAC should institute "Operation Dixie" with the avowed ultimate purpose of controlling elec-

tions in the South, why there is so much talk outside the South about the race problem and what the South should do about it even though the South settled that problem long ago in the only natural and sensible way in which it can be handled, why so many "welfare" and "uplift" organizations are formed to rescue the South from itself.

Particularly, the people of the South might wonder why a Russian writer, recently returned to his native land from a visit to this country, should single out the South for derogatory comment. This writer, a more or less official representative of the Russian government, as are all Russians who are allowed to travel at all, goes back to Moscow and in an Associated Press dispatch from that place describes Mississippi as a place where "whites shiver with fright thinking about the mass of unfortunate, angry people who may become tired of singing hallelujah while waiting their turn to be hanged." Such a statement would be laughable if it were not sinister.

When he goes on to say that "the South is on the eve of decisive events, either the slaveowners will withdraw or the Negroes will begin a struggle for equality", he is encouraging and inciting race trouble. But, it must be remembered, he is doing no more than was attempted in our own country when the establishment of a permanent FEPC, against the solid opposition of the people of the South, was defeated only through the courage of those Southern senators and representatives who prevented it from coming to a vote. The Russian writer was merely repeating the sentiment and philosophy of the proponents of this measure, which was un-American, bureaucratic, and dictatorial to the core. In doing so, he reveals the red thread of communism which runs through all these measures that attempt to bemean the South. It should at least be pointed out that this Moscow-FEPC-PAC axis can be just as dangerous to the future peace and welfare of this country as that other axis which has recently been liquidated through the united efforts of this whole nation.

All these pieces fit into the same picture — an attempt to undermine the democracy of the South, an attempt to divide the people by stir-

ring up racial strife. It should be realized, too, that these forces are not interested in the Negroes; they are only attempting to use them to weaken the position of the South.

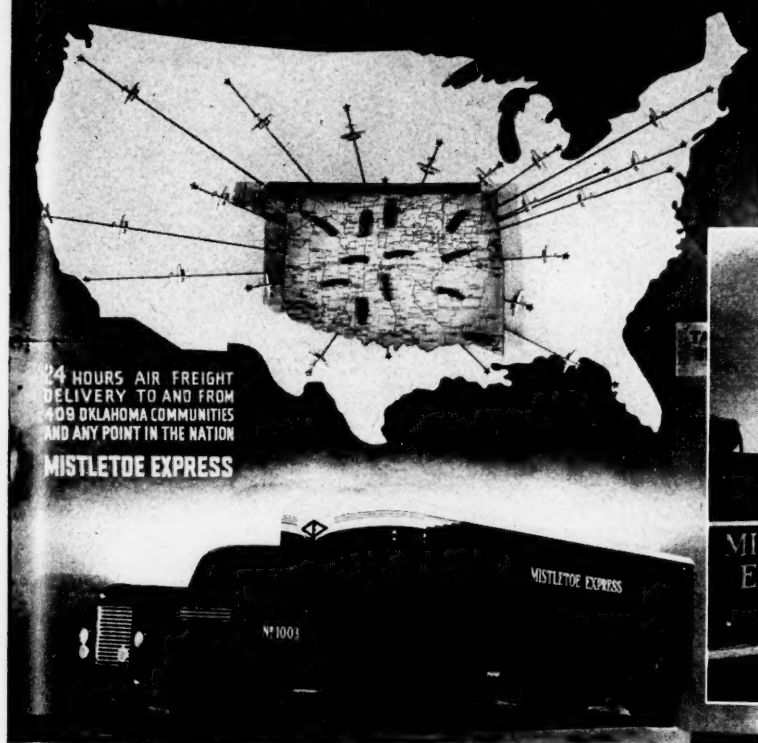
This same insidious attempt to divide and conquer is used in connection with the recent invasion of the South by national labor organizations. Such headlines as "The CIO Invades Dixie" are calculated to leave the impression that an outside force is coming into the South for purposes which the "invaded" region will naturally resist, to leave the impression that the South is therefore anti-labor and anti-union. Yet Southern labor, the very people whom these national labor unions expect to organize, are not a separate class in the South; they are just as much a part of the South as its employers or its professional men; they are the same sort of people with the same ancestry and background, with the same problems and opportunities, with the same hopes and aspirations. To say that the South is anti-labor is utterly foolish; to say that the South is anti-union is simply not so.

The real South not only wants its labor to receive as much in wages as those anywhere in the land, provided such wages can be paid on an equitable basis, but even more, if possible. The real South wants its labor to prosper just as it wants all the parts of its economy to prosper. Southern management proceeds on the theory that all parts of the Southern economy must prosper together, Southern labor included. Southern management is not opposed to labor unions as such, organized to promote the common interests of the worker, and is not opposed to the Southern laborer joining a union any more than to his joining a church or a lodge.

The real intent of the propaganda generally distributed that the South is anti-union is simply an effort on the part of certain elements to prejudice the general public against the South and to cover up what is the real attitude of the South, namely, that the South as a region is opposed to certain things which labor unionism on a national scale has done and is trying to do. For these things unionism itself knows it would be

(Continued on page 76)

# Ship BY HIGHWAYS AND SKYWAYS



## Oklahoma Express Operates Air Freight Pick-Up Service



*Above—First air freight shipment developing from the Mistletoe-Braniff combine of highways and skyways.*

**M**ISTLETOE Express, Inc., in Oklahoma City, has pushed the frontier of modern transportation back through the development of the statewide pick-up and delivery of air freight—a service that is unique in Oklahoma transportation history. Mistletoe, through its statewide trucking routes and contracts with five major airlines, offers 24-hour delivery service between 409 Oklahoma communities and all major markets in the nation. Oklahoma is understood to be the only state with such an air-freight network.

In November, 1945, Mistletoe Express and Braniff Airways worked out an arrangement for the pick-up and delivery of air freight for Oklahoma merchants, jobbers and individuals. In September of 1946 negotiations were completed with American Airlines and Continental for a similar service. Continental's affiliation with Western Airlines and Braniff's with TWA brought the entire nation to the door of busi-

nesses and homes throughout the state.

Industry, agriculture and retailing in Oklahoma were quick to look into the opportunities and possibilities offered by Mistletoe's unique statewide air-freight network.

Kaiser-Frazer dealers throughout Oklahoma scheduled demonstrations of their new Rototiller on the afternoon of May 3, 1946. Production on the machines was delayed and they were not ready for shipment until the afternoon of May 2.

On the evening of May 2, an air carrier left the Kaiser-Frazer plant at Willow Run, Michigan, arriving at the Oklahoma City Municipal Airport at 9 o'clock the morning of May 3. The Rototiller tractors were loaded immediately onto Mistletoe trucks and were delivered to dealers throughout Oklahoma early in the afternoon of the same day.

Thus, through the coordinated service of Slick Airways and Mistletoe Express, the tractors were ac-

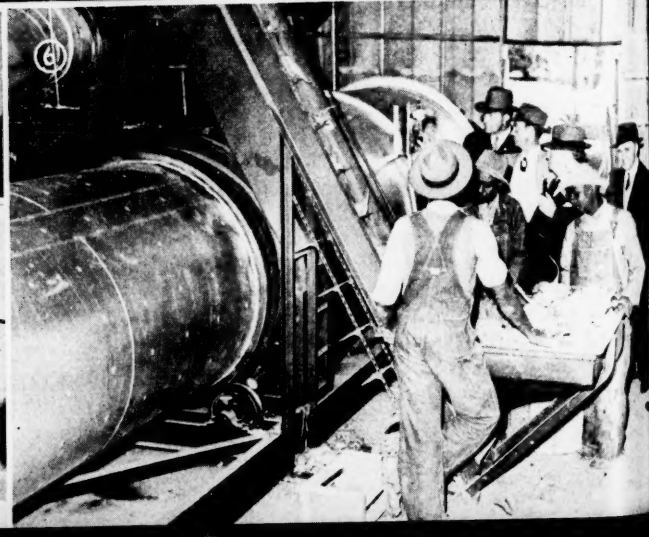
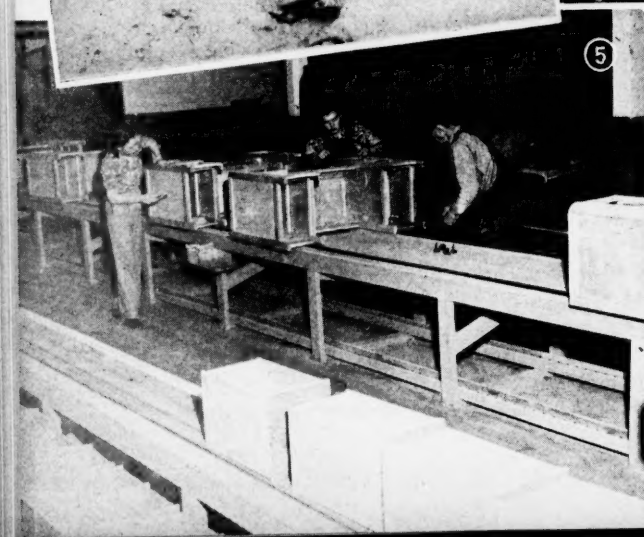
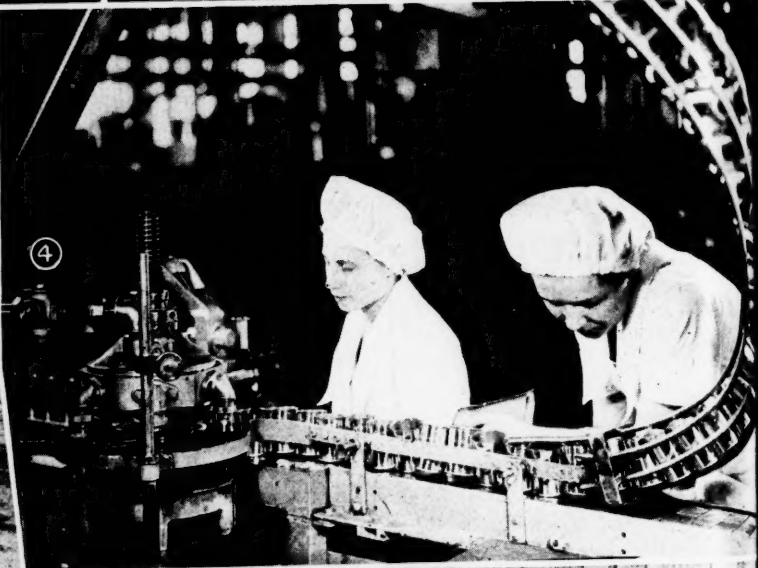
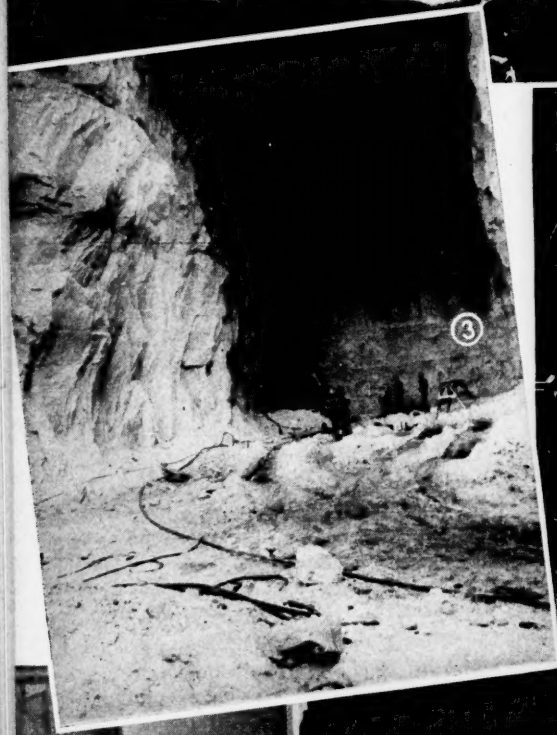
tually being demonstrated in rural areas near Ardmore, Ponca City, Enid and other points in less than 24 hours from the time they left the factory.

To date the most expansive utilization of Mistletoe's air-freight delivery service has been by the florists of Oklahoma. Flowers shipped from California come through without ice. Traveling at night in high cool altitudes, they arrive in perfect condition; and because they are so handled have two if not three days longer life.

To illustrate: Hornadays Flowers of Lawton, Oklahoma, placed an order by wire with a Los Angeles supplier for a shipment of carnations unavailable in local markets. The shipment was placed on a cargo plane in the west coast city at 6 p. m. on September 11. Through the close coordination of the airline and Mistletoe, the Oklahoma florist, 100

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# ARKANSAS CAMPAIGNS FOR INDUSTRIES OWN



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# OWNED AND MANAGED BY ARKANSANS



Above—At left is the new plant of Baroid Sales Division, National Lead Co., in the Magnet Cove area near Malvern. The mill at the right is that of International Paper Co., Camden.

Arkansas industries pictured on the preceding page are: 1—Camark Pottery Co., Camden, Ark. 2—The Ben Pearson Archery plant, Pine Bluff, largest of its kind in the world. 3—Mining glass sand in North Arkansas near Guion. 4—A cannery at Van Buren. 5—Furniture on the assembly line of a Fort Smith plant. 6—Workmen feeding sweet potatoes into a dehydrator for conversion into carbohydrate livestock feed.

by  
**Frank Cantrell**

Manager  
Arkansas Economic Council  
State Chamber of Commerce

**L**ONG the butt of hillbilly jokes and a perennial candidate for cellar champion in the national economic standings, Arkansas at last is getting a new kind of publicity—one in which it basks with satisfaction—as other states watch with a good deal of interest its efforts to achieve a higher degree of well-being through increased industrialization.

This is not a new ambition for the South and West which have been trying for years to escape dependence for their wealth on production and sale of raw materials. What attracts attention to Arkansas is the state's new method of attacking the problem. Also the fact that its strivings appear to be getting results as reflected by such reliable indices

as telephone installations, life insurance sales, per capita income, bank deposits and so forth.

Arkansas has junked the time-honored procedure of sending emissaries North and East in the hope of enticing manufacturing plants into the state. As a result of the war-stimulated trend toward industrial decentralization, Arkansas is now receiving its share of absentee-owned plants. But it is not concentrating on these. Instead, essence of the Arkansas plan is to focus all energies within the state on a campaign for creation of more industries financed and managed by

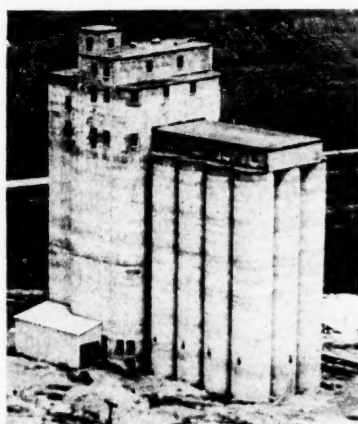
Arkansans and producing end-products from Arkansas materials.

The plan is being pushed vigorously by means of statewide organization work in the counties and through close coordination of business men as represented by the Arkansas Economic Council-State Chamber of Commerce, state officials connected with the Arkansas Resources and Development Commission, and educational forces in the Bureau of Research, University of Arkansas, and the Arkansas Agricultural Extension Service. Results: Substantially more than 1,000 new Arkansas manufacturing plants or important additions to existing concerns since 1940.

Typical of the sort of enterprise Arkansas is trying to develop more extensively is the Ben Pearson Company of Pine Bluff which employs some 500 persons in the manufacture exclusively of bows, arrows and archery gear. In existence about eight years, the Ben Pearson Company's sales have increased to around \$2,000,000 annually. Another example is the B. T. Fooks Manufacturing Co., makers of a soft drink called Grapette which has shown such a rapid growth in acceptance that its product is being bottled not only throughout the United States but is spreading rapidly in Central America. Still

(Continued on next page)

Below—Typical of the eight large rice driers built or being erected within the past year is this \$250,000 concrete structure at Jonesboro.





**Above**—At left is the El Dorado refinery of Lion Oil Co., which is spending \$1,000,000 on conversion of war-built anhydrous ammonia plant to civilian manufacture of ammonium nitrate fertilizer and is also adding a \$500,000 cracking unit. The interior scene at the right is in the Ward Body Works, Conway, where a \$150,000 expansion is under way.

**Circle**—Air view of Aceme Brick plant just outside of Malvern. The company is spending \$150,000 to bring its Little Rock plant into production.



**Below**—The \$44,000,000 Hurricane Creek alumina plant, near Little Rock, which has been leased along with the Jones Mill aluminum reduction plant near Malvern by Reynolds Metals Co.



(Continued from preceding page)  
another is the major independent Lion Oil Company of El Dorado, currently spending around \$1,000,000 on new refining units and taking over a war-built chemical plant for peacetime manufacture of fertilizer.

There are many more. Expansion has been largest in wood products, including furniture, in processed foods and in non-metallic minerals. A case in point is Arkansas' important home-owned vegetable industry, now totaling more than 125 canneries, producing an annual pack in excess of 10,000,000 cases of vegetables and leading the nation in canned spinach. Its commercial broiler production, nearly all processed within the state, has grown to about 25,000,000 fowls annually, poultry and eggs bringing \$45,000,000 a year. The state is beginning to cash in on its rich natural resources.

Traditionally an agricultural state with some 60 per cent of its population of nearly two million engaged in farming before the war, Arkansas has suffered from the low cash income characteristic of small-unit rural areas. In 1940, for example, Arkansas' per capita income was \$252, only 44 per cent of the national average. It had six manufacturing establishments per 10,000 population compared with the U. S. average of 13.9. In value of manufactured products, it ranked lowest in the South. That condition may

(Continued on page 68)



Above—Scenes in a new plastic products plant developed in Florida by a Navy veteran. At left an operator makes towel holders. In the middle view, the owner's father builds jigs. The picture at the right shows a pre-heated soap-dish blank being taken from the automatic electric oven. Completed soap dishes are in the jig.

**B**ACK in 1944, Keith Vining lay in bed in a hospital in Shoemaker, California, convalescing from tropical disease contracted in the South Pacific. Having been a gadgeteer before donning Navy Blue, Keith amused himself by reading about plastics, and by the time he could wobble around, he had soaked up so much detail that the Navy promptly set him up as an instructor in plastics in their California occupational therapy program in camps and hospitals.

Keith learned as he taught, and after his discharge on October 1, 1944, came home to Daytona Beach and opened a shop to sell "custom-built plastic and wood devices." A friend, who worked for Bell Aircraft in Georgia, tipped Keith off to the fact that there was a tremendous stock-pile of scraps left over from B-29 plastic blisters. These scraps were of unusual construction. In order to withstand the hardening and stretching stresses set up by high-altitude flight, they were made of two layers of plexiglass with a transparent layer between. Maybe, said the friend, Keith could figure out a way to put this material to work.

Keith could, and did. A few weeks later, the plastic clothespin was born. By slicing the scraps into small blocks, and then hollowing out a fork in the block, a spring tension clothespin was made. The inner

## PRACTICAL PLASTICS — a new Florida industry

by  
Frank L. Harvey

layer of rubber made it grip like a vise. The pin was non-corrodable and easy to use.

Almost overnight the world beat a path to Vining's door. He had obtained full patent rights, and quickly

put up a new shop to handle clothespin production. In the months that followed (while the B-29 scrap held out) Vining made and sold over a million pins, using machinery of his own design and employing six GI's to help him.

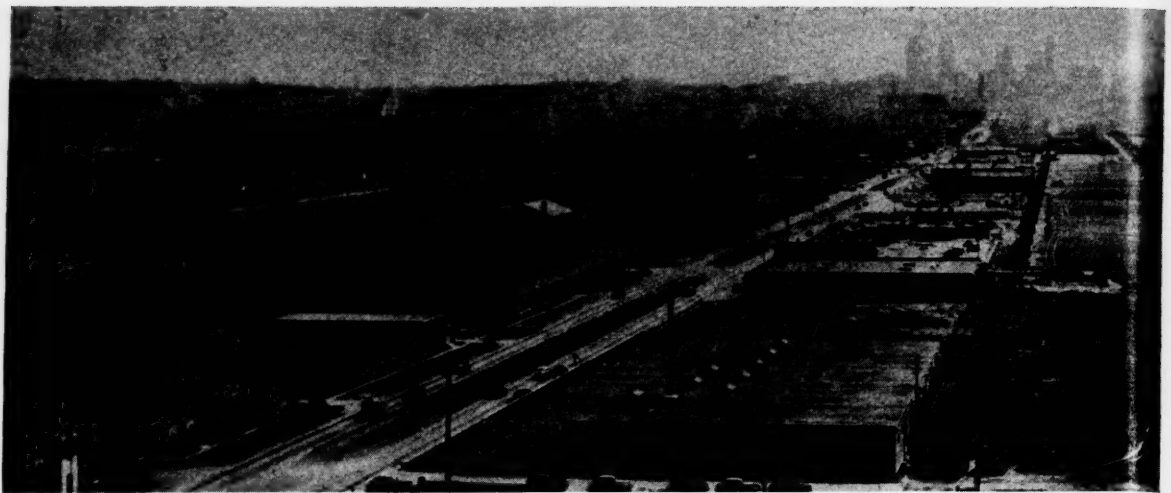
Foresighted Mr. Vining, however, did not rest on his laurels. While the clothespin business was humming, he set about designing ma-

(Continued on page 66)

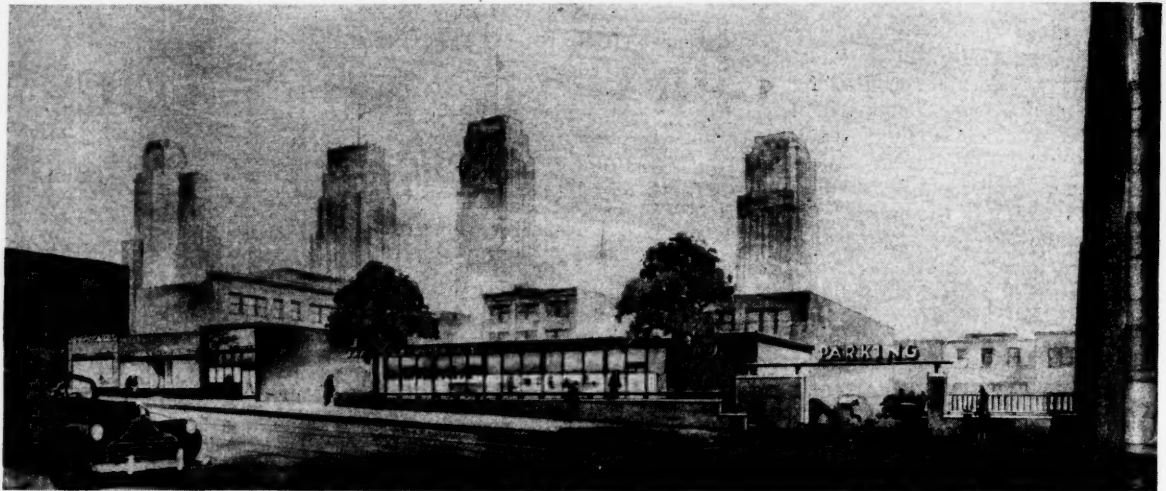


Right—Keith Vining makes towel bars in one of his own rotating jigs.

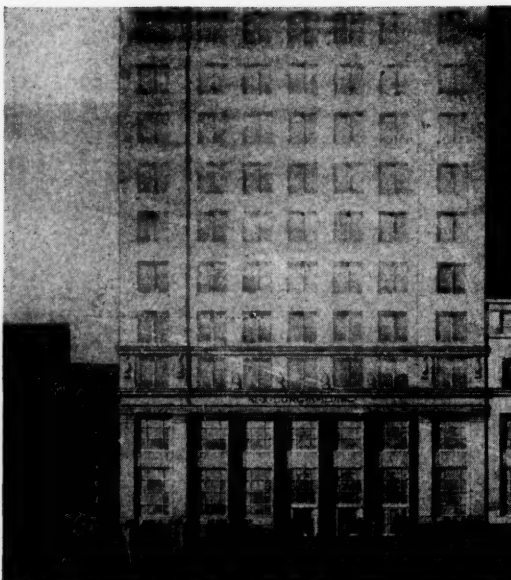




*Above—Part of the North Kansas City industrial area, which extends widely in all directions and is being built up rapidly with large one-story industrial buildings.*



*Above—Artist's conception of a stretch of Kansas City's Main street rehabilitation as suggested by the city's downtown committee.*



*Below—Perspective of the new City National Bank and Trust building soon to be completed near the center of Kansas City's financial district.*





Above—Pratt & Whitney engine plant available for occupancy by industry. Applications are far in excess of space.

## KANSAS CITY PREPARES FOR RAPID INDUSTRIAL GROWTH

by  
Richard S. Haggman

**K**ANSAS City's outlook for the near future indicates employment needs will over-balance any reductions occurring as a result of supply shortages, according to a recent survey by the United States Department of Labor. Net labor demands for the period show an increase of approximately 4,000. Present total employment for the Kansas City area is above the wartime peak, suggesting that manufacturing industries in the area are operating at a greater capacity and output than at any other peace time period.

This good record in industrial employment and production verifies a recent prediction by the Greater Kansas City Committee for Economic Development, sponsored by the Chamber of Commerce, to the effect that:

1. Of 660 firms in the Greater Kansas City area studied (out of a total of over 3,000) employment planned for the fall of 1946, compared to 1940, would show an increase of 40.5%.
2. Of the total of 660 concerns studied, 221 were manufacturing firms indicating an increase of 39.3% in employment, 1946 compared with 1940. The CED reports a planned expenditure in construction of over \$100,000,000 for 1946-1947-1948. To digress, the Department of Labor reports a current em-

ployment of over 12,000 construction workers, in spite of the present scarcity of construction items and materials.

Through its public utilities, including its Power and Light Company, Public Transit System and Gas Company, Kansas City is adding facilities for serving its rapid industrial growth, through the expenditure of over \$45,000,000 for added facilities.

Municipal Governments of Greater Kansas City are planning improvements for future requirements of an increased population, these improvements to cover total expenditure of nearly \$44,000,000.

Added health and hospital facilities are in the process of being provided, involving the expenditure of

*(Continued on page 64)*

# CARDED YARN MAKERS MOVE TO MAINTAIN ORDERLY MARKET

**T**HE Carded Yarn Association's 175 member mills, operating 2,000,000 Southern and New England spindles, have donned combat equipment in readiness for a struggle to maintain orderly marketing during the "hard times" expected to accompany the approaching decontrolled trade.

These mills comprise the cotton textile manufacturing industry's division closest to raw cotton. They occupy, therefore, a vital position at the apex of the delicately balanced, inverted pyramid which is the entire industry.

During several recent years carded yarn mills operated in conditions described as "chaotic" but conditions were improved somewhat this Autumn when control was revised and prices were advanced under provisions of an admitted "messy" OPA revival statute. Lately, as prospects for decontrol brightened, and cotton markets became hysterical, carded yarn spinners were called hurriedly into an emergency convention at Charlotte, N. C., November 15, to survey in principle long-term defenses against now anticipated unrestrained competition and surpluses.

However, any word or action favoring of price fixing is carefully avoided in these discussions. The mill executives have heard enough about Federal "cease and desist" orders directed to other segments of American industry.

Main purpose of the convention called by Owen Fitzsimons, president of the association, was to shower upon the mill executives warnings against involving themselves in an orgy of cut-throat selling. This preparedness reveals a tendency of great significance for textiles—because carded yarn is a small, strategically placed, belligerent spot on the nation's great manufacturing map.

Also, carded yarn is recognized as an element in cotton milling that is inclined to play an independent, lone hand frequently. Furthermore, the association's constitution, citing the mills' precarious economic position, declares that managements

"realize that there are headaches in plenty" even in ideal sales yarn trade conditions.

However, these spinners now are demonstrating more plainly than ever before their understanding as individuals of their mutual responsibilities to themselves, their employees, the cotton growers, the whole textile industry and the nation's economy. This understanding is revealed at a time when carded yarn is faced with very real, highly disturbing threats of "invasion" on two fronts by powerful divisions of business: industrial consumers of cotton sales yarns and synthetic fiber producers. This impending fight accentuates the fact that carded yarn never has been overly strong economically, because of the mills' tendencies toward "rugged individualism" and the fact that yarn prices are tied to unstable raw cotton prices.

Admittedly the outlook for the whole textile industry is dappled with gobs of gloom. Lately the industry's economic advisors voiced warnings that a general business recession will start not later than next Spring. Some consolation was given in the forecast that the recession may be less painful than that which overwhelmed the industry after World War I.

The October crashes in the cotton markets rudely impressed mill managements that they are beginning to experience the strange tasks of bucking newly organized resistance in free enterprise. Therefore, the spinners are moving into combat array—burdened with the responsibility of fighting "delaying actions" while the textile industry's upper layers hasten readjustments from war-beset and OPA-harassed operations.

In this time of stress, no wonder it was that the shrewd Fitzsimons, former right-hand man of the Cotton-Textile Institute's Dr. Claudius Murchison, hastily set about re-

by

J. A. Daly

orienting his carded yarn forces and mentally equipping them to defend the principle of industrial sanity amidst revived competition. If these manufacturers win the campaign, the whole cotton textile industry, massive keystone of American soft goods production, may be able to avoid distressing, permanent setbacks in the Battle of Deflation. The stakes are high and the prospects are rather forlorn.

A comparable battle was lost by cotton textiles in World War I's readjustment period. Carded yarn was the first casualty among the industry's numerous divisions. That 1920 debacle set back the industry so decisively that stability was not reattained fully until shortly before World War II exploded in Europe.

Carded yarn is essentially a sales yarn industry which often meets stern resistance from its biggest customers, the knitters and weavers. But, carded yarn mills, operating on the first processes of cotton manufacture, easily and quickly can, and often do, vary their production specifications. This often is a factor of economic weakness.

These mills have almost unlimited opportunities for substitution of grades and staples of cotton, for changes in twist, and for a multitude of other deviations in cost factors—all of which varies quality.

Some plants, of course, are in better productive positions than others, for various reasons. But, at best, the price picture of carded yarn is kaleidoscopic under free trade competition. This is well known to sales yarn consumers, who in turn must contend with their own varieties of trade rivalry.

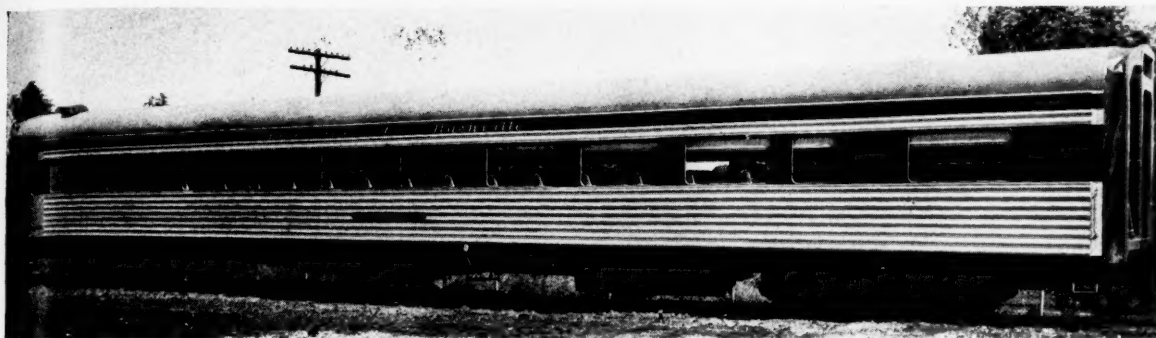
Furthermore, when sales yarn prices and production go haywire, the apparel trades, miscellaneous industrial consumers of textiles and even retailers are given fearful visions of disintegration of the whole textile trade structure. Such situations at approximately two-year intervals in the past have upset many segments of the nation's closely interrelated economy.

(Continued on page 64)

Above—streamlined Louisville cars use American St. Cha

Below—the new Bottom



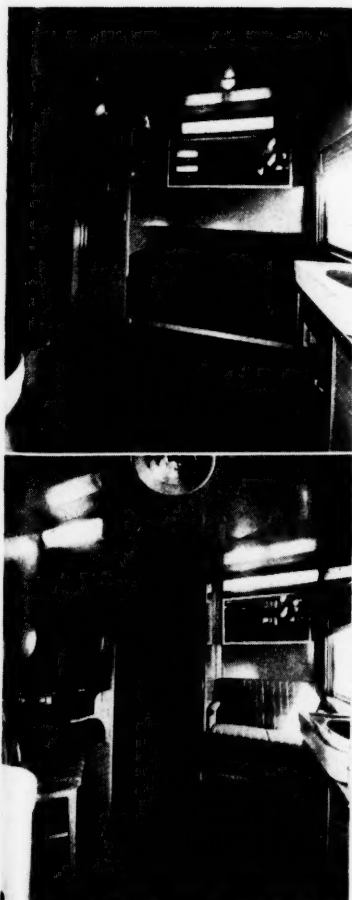


*Above—First of the four seven-car streamlined trains delivered to the Louisville and Nashville Railroad. The cars were designed and built by the American Car and Foundry Company's St. Charles, Mo. passenger car plant.*

## Louisville and Nashville Receives New Streamlined Passenger Trains

*Below—top—Spacious men's lounge in the new Louisville and Nashville streamliners.*

*Bottom illustration shows the ladies' lounge.*

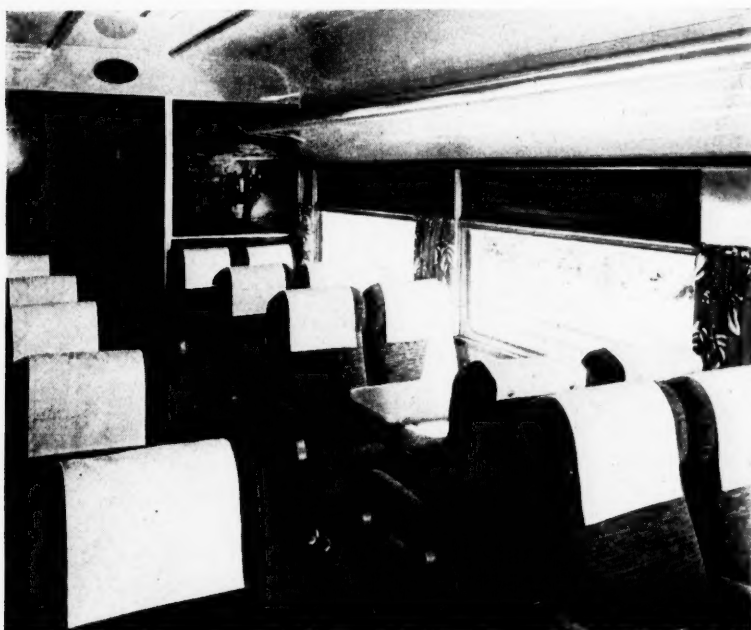


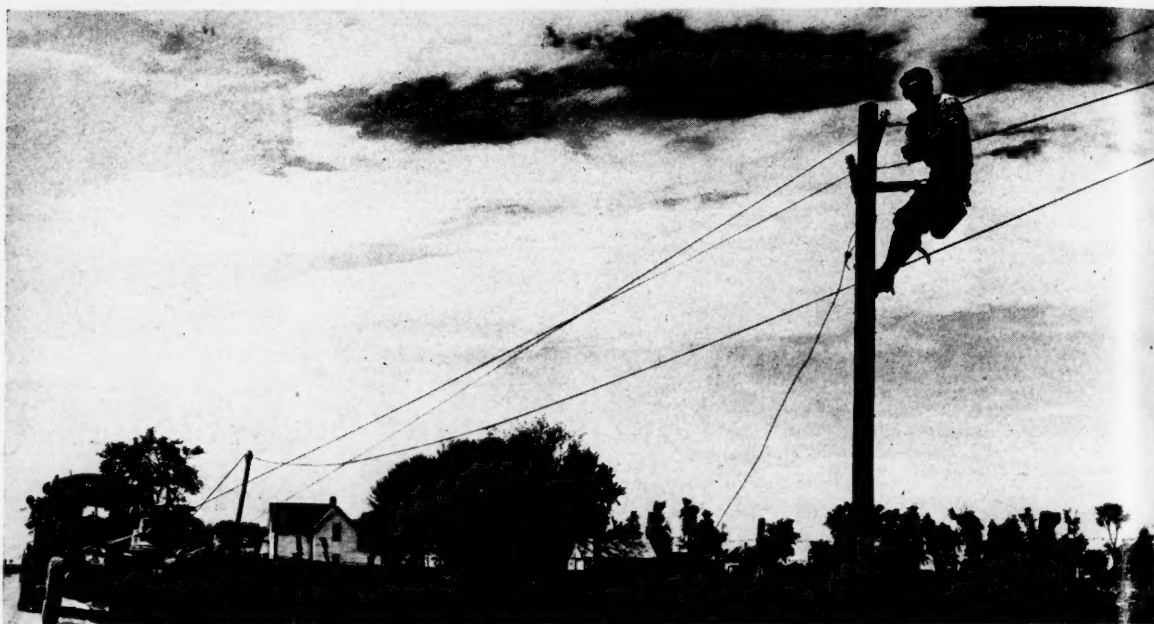
**T**HE Louisville and Nashville Railroad has just accepted delivery of the first of four postwar streamliners built by American Car and Foundry Company at its St. Charles, Missouri passenger car plant. The additional streamliners are well on the way towards completion and it is expected all four of these trains will be placed in regular service by the railroad during the current month.

Following an exhibition tour, the two trains which have been christened "The Humming Birds" will be placed in service on fast day runs between Cincinnati and New Orleans, and the other two, christened "The Georgians" will operate between St. Louis and Atlanta, using the Nashville, Chattanooga & St. Louis Railway between Nashville and the Georgia capital.

*(Continued on page 64)*

*Below—Interior of one of the new Louisville and Nashville coaches, showing card table in place. Murals on bulkheads at ends of cars show scenes along the railroad's routes.*





*Above—Fast moving construction crews push telephone lines deeper into rural areas.*

## Chesapeake and Potomac Telephone Companies Spending \$38,500,000 In Four States

**WORKING** at top speed in an all-out effort to meet phenomenal demands for telephone service, the four Chesapeake and Potomac Telephone Companies of Washington, Maryland, Virginia and West Virginia today are moving ahead on the first leg of a vast, five-year construction program involving the expenditure of hundreds of millions of dollars for expansion and improve-

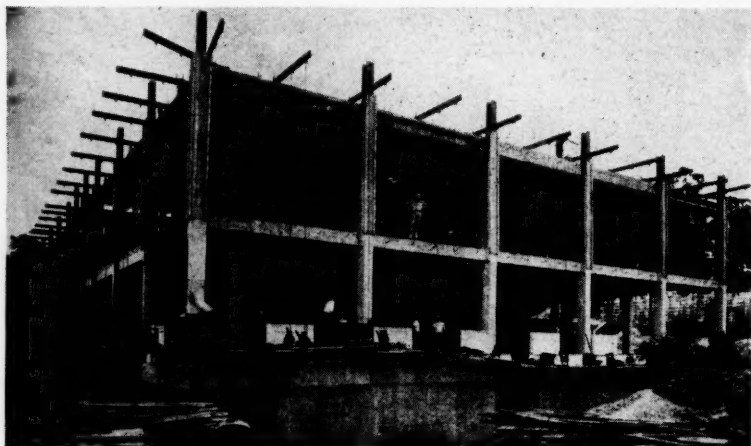
ment of facilities in every section of the four states.

Allotting A-1 priority to new construction, the C. and P. companies late in 1945 swung into high gear on an unprecedented program which has as its major objective the provision of telephone service to all who want it when they want it. Today, some ten months later, all four companies have spent large amounts of

money to construct new buildings and building additions, expand outside plant, make major installations of central office equipment and substantially enlarge local and toll cable networks.

In 1946 alone, the C. and P. companies will roll up expenditures of approximately \$38,500,000 with the Maryland company spending \$12,000,000, Virginia \$11,000,000, Washington \$10,000,000 and West Virginia, \$5,500,000.

The major portion of the four-state construction program, greatest in the history of the C. and P., calls for the expenditure of vast sums for the installation of equipment on customers' premises. Indicative of the amounts scheduled for this purpose is the \$5,000,000 to be marked up by the Washington



*Left—New \$3,000,000 dial center under construction in Washington is one of many now being carried out by Chesapeake & Potomac companies in the District of Columbia, Maryland, Virginia and West Virginia.*

**Right—Workers of the Chesapeake and Potomac Telephone Company of West Virginia pull cable at Huntington. Such scenes are familiar throughout the four-state area served by C. & P. companies.**

company in 1946. Telephone officials there estimate that approximately \$27,000,000 will have been spent on this item by the end of 1950.

In West Virginia, the C. and P. will disburse nearly \$1,100,000 this year to provide additional central office equipment throughout the state, while \$1,800,000 will be expended for cable, wire and poles.

Further pointing up the size of the overall program is the Washington company's announcement that the end of the five-year expansion will see a 30 per cent increase in its plant investment. By the end of 1950 that investment will total an estimated \$100,000,000 as compared to \$78,000,000 at the end of 1945.

Also figuring prominently in the four-company expansion picture is an extensive program to improve and enlarge telephone facilities for families in rural areas in Maryland, Virginia and West Virginia. Upwards of \$11,000,000 will be spent by the C. and P. in these three states to bring telephone service to thousands more in rural sections.

The speed with which the tremendous program is being carried out is dependent, to a great extent, of course, upon the availability of vital equipment. Critical shortages of raw materials so necessary in the production of all types of telephone equipment, have seriously curtailed construction and installation schedules in many sections of Washington, Maryland, Virginia and West Virginia.

The Western Electric Company, supply unit of the Bell System, has the productive capacity to manufacture needed equipment fast enough and in sufficient quantity to meet sky-rocketing demands but its supply of raw materials is well below actual requirements. Lead, copper,



steel, plastics, lumber, wood pulp and paper are but a few of the materials not yet in sight in sufficient quantity to meet ever-increasing needs. However, Western is working from day to day and hour to hour with Bell Laboratories engineers in introducing substitute materials where others can not be found. It is searching out and buying everything that looks even re-

motely usable. It expects to break the supply bottleneck.

In the meantime, the four C. and P. companies, despite operating under handicaps, are confident they can meet their objectives and reach the day when supply will be abreast or ahead of demand. Lending emphasis to this confidence is the fact that the companies' programs are of

*(Continued on page 62)*



**Right—Perspective of the \$4,000,000, six-story dial center being erected in the eastern section of Baltimore by the Chesapeake and Potomac Telephone Co. in that Maryland city.**





Above—Close-up of the present Frisco north yards at Springfield, Mo., where \$5,000,000 will be spent for improvements by the St. Louis-San Francisco Railway Lines.

## Frisco to Expand Rail Yards at Springfield, Cost \$5,000,000

**T**HE St. Louis-San Francisco Railway (Frisco Lines) has revealed plans for a \$5,000,000 expansion and improvement program for its yards at Springfield, Mo. The project, which will include the building of new yards at a cost of \$2,288,900 and mechanical improvement to existing facilities costing approximately \$2,618,200, will be the largest single construction job ever undertaken by the Frisco.

Details of the construction program were told October 19 when Frank A. Thompson, trustee of the Frisco, filed a petition with U. S. District Judge George H. Moore in St. Louis asking permission to make the expenditure for the program. Mr. Thompson asked that a special fund be set aside for the program, advising the court the railroad had sufficient cash on hand to finance it.

Mr. Thompson said the construction program proposed by the Frisco will consist of additions to the facil-

ities of the present West Locomotive and Coach Shop and the laying of tracks parallel to the freight main line and bounded by the main line on the south and the Shops on the north. The western boundary will be a short distance east of Highway 66 by-pass and the eastern boundary near Broad Avenue.

Total trainyard trackage in the project will amount to 40.4 miles with 141 switches and a capacity of 2,960 cars—an increase of approximately 2,000 cars over present capacity, Mr. Thompson said after filing the petition. Another 13.6 miles of track with 54 switches will be used in the new mechanical facilities.

The Frisco trustee declared the proposed Springfield project will expand the yard facilities there to a greater capacity than any other point along the Frisco system and will overcome most of the objections to the present operation which have existed since the early days of the

Frisco. His petition estimated the project would effect a savings of approximately \$400,000 annually in operating costs over present facilities in Springfield.

"Improvements of Frisco facilities at Springfield have not been effected for many years," Mr. Thompson said "and the present facilities are inadequate. This proposed project will overcome most of the objections to the present facilities and will bring the yards to a point of operating efficiency that has long been the goal of Frisco management."

"During the past few years the Frisco has taken many progressive steps in improving its service to the shipping and traveling public," Mr. Thompson said, "and the Springfield project is only a part of a large-scale program to keep this railroad ever in the forefront."

Of particular interest to Springfield citizens will be the removal of the North Yard from its present

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location against Commercial Street, one of the principal business districts of the city, Mr. Thompson said. For several years there have been complaints from business interests of this section and from the residential sections north and south of the business district because of the smoke, fumes and soot from the locomotives and the coal chute. These objections will be eliminated by the proposed project and Frisco officials predicted its completion will open the north side to further business and residential development while at the same time enhancing the value of present real estate holdings in that area.

To complete the project, the Frisco will ask the cooperation of city officials of Springfield and Greene County officials in relocating certain streets which otherwise would conflict with the \$5,000,000 program. The proposal would divert a portion of Division Street which conflicts with the new yards, but the Frisco, however, proposes to pave these portions of North, Fulbright and Calhoun Streets and Hutchinson Avenue and also to place an overpass over Hutchinson Avenue to handle the traffic placed on these thoroughfares by the diversion of Division Street. The Frisco officials declared the proposed relocations and rebuilding of the county and city streets will be an improvement over existing conditions and will not upset the normal use of these thoroughfares, except during actual period of construction.

The "sinkhole" immediately north of Division Street which is now handling the drainage from the area around the West Shops will be covered with the grade from the proposed new yard, officials of the railroad said, but a new opening will be provided approximately 600 feet northwest of the "sinkhole". This new opening will be drained by a ditch and contemplates better drainage than at the present time.

The enormity of the Frisco's project can well be estimated when the 1,150,000 cubic yards of grading is taken into account, officials of the railroad said. In addition to this amount of grading the officials said it was expected workmen will have to blast through 2,000 cubic yards of solid rock to make way for the building program.

A two-story restaurant will be constructed within the limits of the new yard for the convenience of Frisco employes as one of the buildings in the proposed \$5,000,000 project. The restaurant will be located near the Park Avenue grade crossing on the Clinton Line.

Work on the project is expected to get under way just as rapidly as possible if it is approved by the Federal Court, officials of the railroad declared. It is estimated two years will be required to complete the work.

Broken down, the entire project will include the following construction:

#### *New Yard*

Right of way: including 31.6 acres of borrow for grading and future site for contemplated building. Grading: 1,500,000 cubic yards excavation and

borrow (unclassified); 2,000 cubic yards solid rock excavation. Drainage: culvert under yard—concrete box 4 x 4 x 720 feet and miscellaneous drainage openings. Tracks: 40.4 miles of yard track to handle 2,960 cars—including 141 switches; take up, relay and reballast present double track freight main of 28,000 track feet; take up, relay and reballast Clinton Subdivision of 5,500 feet; lower and reballast West Belt 1,000 feet; take up, relay and reballast stock and mill tracks 4,000 feet and lower platform and chutes of stock pens.

Ice facilities: dock 1,000 feet long complete with machinery and 250 ft. cross tunnel.

Track scales: two scales.

Buildings: Superintendents, Centralized Traffic Control and Yard office (two-story, brick—36 x 105

(Continued on page 60)

*Below—Aerial view of the territory around the present Frisco west shops at Springfield, Mo. The southern boundary of the new yards will be the Frisco's main freight line extending from the lower right.*





Above—Grading and leveling operations at the new Humble terminal at Irving.

## HUMBLE STARTS OPERATIONS ON 276-MILE PIPE LINE

**H**UMBLE Pipe Line Company's new 8-inch finished products line was formally opened Tuesday, October 15, literally connecting Humble Oil & Refining Company's Baytown refinery, one of the world's largest, with the heavy consuming areas of North Texas.

Beginning 276 pipe line miles away on the Texas coast, the new underground artery ends at Irving, between Fort Worth and Dallas on the northwest highway. Storage and terminal facilities have been provided for 150,000 barrels of products, and delivery has commenced from the North Texas terminal by rail and transport trucks to sales outlets over a broad territory.

Thus by employing the relatively

low cost transportation of the pipe line, it has been made possible economically to bring to the interior of Texas the high quality gasoline which is the product of catalytic cracking and other advanced refining processes of the great coastal plant.

Catalytic cracking was developed just before the war and its utilization made possible the production of 100-octane gasoline in overwhelming quantities; it is this same process which today provides a motor gasoline of much higher quality than could be manufactured before the war. However, insofar as consumers who live in the interior are concerned, the problem of transportation had to be solved.

The catalytic cracking process requires a relatively high daily throughput, and the refineries of which the "Cat Crackers" are a part are usually capable of handling very large volumes of crude oil daily; Baytown refinery, for example, is currently running about 200,000 barrels each day. Refineries of this magnitude can only be operated at tide-water, so that the markets of the world may be reached by the economical sea-going tanker. Most of the gasoline refined on the Texas coast finds its way to the great consuming area along the Atlantic seaboard.

The small inland refineries, usually processing from five to fifteen

(Continued on page 60)

Above—  
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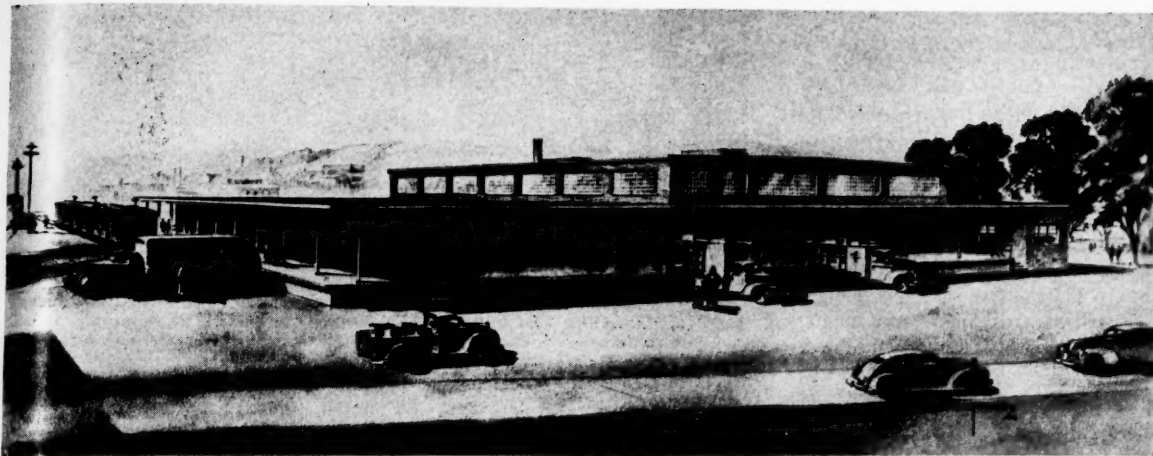
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TOTAL

NOVEMBER





Above—\$500,000 Skyland Processing Corporation plant being erected at Hendersonville, N. C. The building will be 220 feet square and will contain a 400,000-cubic foot processing room for fruits and vegetables, a zero cold storage room of 126,000 cubic feet and an apple cold storage room of 100,000 cubic feet. The plant will have a capacity to process 70,000 pounds of fruit and vegetables daily. Six Associates, Inc., of Hendersonville and Asheville, are the architects and engineers; R. K. Stewart & Son, High Point, the contractors.

## Southern Construction Awards Valued at \$1,512,118,000 in Ten Months

by Samuel A. Lauver

**S**OUTHERN construction contracts rose in value during October for the first time in three months as the total amounted to \$163,884,000, according to tabulations made from reports to the *Daily Construction Bulletin* of the MANUFACTURERS RECORD.

The October total brought the figure for southern construction awards in the sixteen southern states so far this year to \$1,512,118,000, or almost two-thirds above the aggregate for the comparable period of

last year when southern contracts totaled \$907,997,000.

Rises in all categories of construction were recorded in October to carry the total almost thirty-eight per cent ahead of the \$119,552,000 for the preceding month. The most substantial dollar increases were in the value of industrial awards and highway and bridge projects.

Industrial construction awards in October reached the highest point in more than a year. The total was \$57,483,000. This figure has not been

equalled or surpassed since September of 1945, when the monthly total for such work was \$59,855,000. Only one month in 1946 even approached the October level and that was March with its industrial awards amounting to \$54,051,000.

The October highway total was \$38,094,000, a figure representing a more than sixty-three per cent increase over the \$23,248,000 for September. Three other months year have seen higher totals for highway awards. These were the peak month of April with its \$51,871,000 total and August and May with totals of \$40,456,000 and \$39,533,000, respectively.

Private building during October totaled \$34,241,000. This was the highest total for private building in three months and represented a sixteen per cent rise over the \$29,667,000 total for private building in the preceding month. Dwelling construction, as in every month since March, was the most substantial contributor to the October private building total.

Both of the remaining components in the southern statistical construction picture showed increases.

### SOUTH'S CONSTRUCTION BY STATES

	October, 1946		Contracts	Contracts
	Contracts	Contracts	Awarded	Awarded
	Awarded	to be	First Ten	First Ten
		Awarded	Months	Months
			1946	1945
Alabama	\$ 7,609,000	\$ 30,564,000	\$ 60,822,000	\$ 66,698,000
Arkansas	338,000	4,713,000	44,003,000	9,358,000
Dist. of Col.	602,000	6,010,000	13,379,000	29,207,000
Florida	20,047,000	27,376,000	172,155,000	58,674,000
Georgia	9,885,000	24,743,000	124,866,000	32,665,000
Kentucky	531,000	15,047,000	42,195,000	16,154,000
Louisiana	9,046,000	14,142,000	76,512,000	50,179,000
Maryland	16,674,000	54,413,000	137,110,000	68,470,000
Mississippi	2,672,000	16,132,000	60,413,000	33,561,000
Missouri	10,517,000	12,276,000	45,067,000	34,179,000
N. Carolina	3,813,000	24,618,000	68,658,000	46,818,000
Oklahoma	5,469,000	8,485,000	48,476,000	28,459,000
S. Carolina	3,316,000	44,702,000	70,629,000	15,276,000
Tennessee	24,204,000	37,698,000	94,762,000	43,184,000
Texas	42,346,000	118,230,000	388,677,000	276,648,000
Virginia	6,820,000	29,824,000	52,934,000	53,204,000
W. Virginia		3,143,000	11,510,000	15,313,000
<b>TOTAL</b>	<b>\$163,884,000</b>	<b>\$472,066,000</b>	<b>\$1,512,118,000</b>	<b>\$907,997,000</b>

Public building rose from \$17,863,000 in September to \$19,693,000; engineering construction, from \$10,103,000 to \$14,373,000. Schools remained the most important with a total of \$10,231,000. However, the gap between government building and school construction widened, as may be seen from the fact that schools in September amounted to \$7,627,000; actual government building, to \$6,949,000.

Earthwork, drainage and airports are the largest factor in the heavy engineering field with a total of \$9,260,000. Sewer and waterworks awards totaled \$3,695,000. The total for this type of work in the preceding month was \$6,857,000. Rural electrification continued with contracts placed at \$1,418,000.

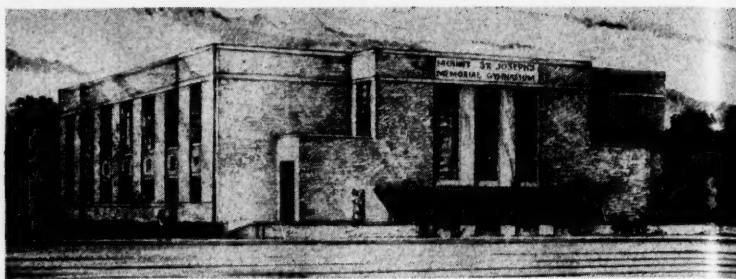
Considering southern construction statistics for the elapsed months of 1946, the picture shows decided shifts in all categories except industrial work, which remains in the top position with a total of \$366,688,000 although the figure is a drop from the \$392,392,000 total for industrial construction in the same months of last year.

Private building is the second most important contributor to the ten-month figure. The total for this type of work is \$362,688,000, as compared with the \$61,255,000, which meant that private building was in fifth place at the end of October, 1945. Residential building, now as then, is the largest part of private building. The current \$264,409,000 total, however, is eight times that registered for residential work in the first ten months of last year.

Third place in southern construction is held by highway and bridge contracts. Value of the current year's awards for work on the South's highway systems is \$306,586,000, or well over three times the \$91,298,000 for the first ten months of last year. This represents a substantial increase in volume despite the rise in costs. Current restrictions to facilitate the veterans' housing program have retarded such work to some extent.

Heavy engineering construction, which last year was third in importance, is fourth so far in 1946, having switched places with highways. The current ten-month figure total is \$243,450,000, embracing \$171,860,000 for dams, drainage, earthwork

(Continued on page 58)

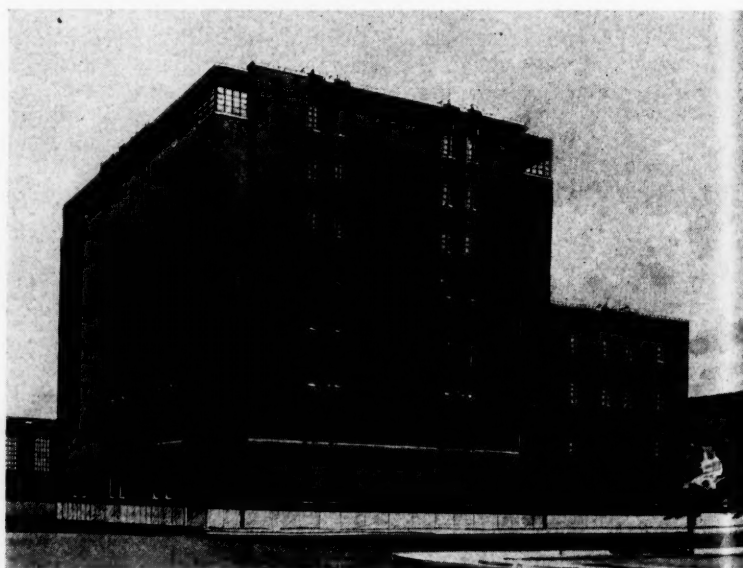


Above—\$400,000 memorial gymnasium to be erected at Mount St. Joseph College, Baltimore. The building was designed by James R. Edmunds. It will seat approximately 6,000 spectators and will have an exterior of brick and limestone.

## SOUTH'S CONSTRUCTION BY TYPES

	October, 1946	Contracts to be Awarded	Contracts Awarded First Ten Months 1946	Contracts Awarded First Ten Months 1945
<b>PRIVATE BUILDING</b>				
Assembly (Churches, Theatres, Auditoriums, Fraternal) .....	\$ 1,048,000	\$ 8,682,000	\$ 22,114,000	\$ 11,629,000
Commercial (Stores, Restaurants, Filling Stations, Garages) .....	5,216,000	5,377,000	56,830,000	13,761,000
Residential (Apartments, Hotels, Dwellings) .....	27,679,000	24,472,000	264,409,000	32,322,000
Office .....	298,000	1,667,000	19,335,000	3,545,000
<b>INDUSTRIAL</b> .....	<b>\$ 31,241,000</b>	<b>\$ 40,198,000</b>	<b>\$ 362,688,000</b>	<b>\$ 61,255,000</b>
<b>PUBLIC BUILDING</b>				
City, County, State, Federal ..	\$ 6,298,000	\$ 59,249,000	\$ 136,486,000	\$ 164,147,000
Housing .....	3,154,000	2,078,000	9,007,000	18,623,000
Schools .....	10,241,000	76,729,000	87,167,000	24,010,000
<b>ENGINEERING</b>	<b>\$ 19,693,000</b>	<b>\$ 138,056,000</b>	<b>\$ 232,660,000</b>	<b>\$ 206,780,000</b>
Dams, Drainage, Earthwork, Airports .....	\$ 9,260,000	\$ 31,101,000	\$ 171,860,000	\$ 100,923,000
Federal, County, Municipal Electric .....	1,418,000	42,798,000	23,920,000	19,401,000
Sewers and Waterworks .....	3,695,000	30,794,000	47,670,000	35,945,000
<b>ROADS, STREETS AND BRIDGES</b> .....	<b>\$ 14,373,000</b>	<b>\$ 104,693,000</b>	<b>\$ 243,450,000</b>	<b>\$ 156,272,000</b>
<b>TOTAL</b> .....	<b>\$ 163,884,000</b>	<b>\$ 472,066,000</b>	<b>\$ 1,512,118,000</b>	<b>\$ 907,997,000</b>

Below—Eight story office building being erected at St. Louis, Mo., by Monsanto Chemical Co. The project will cost over \$1,100,000.



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Precision fixture dr

# News from Industry

## Products and Services

**Petroleum Chemicals**—Ethylene glycol and ethylene oxide are among the initial products to be manufactured by Jefferson Chemical Co., Fort Neches, Texas, it is announced by P. M. Dinkins, president. Jefferson Chemical was organized in 1944 by The Texas Co., and American Cyanamid Co., to produce chemicals from petroleum and petroleum gases.

**Water Filters**—New line, for swimming pools and industrial filtration, now in production at Bowser Inc., Fort Wayne, Ind. Range in capacity is from 15 to 500 g.p.m. with 7 to 248 square feet of filtering area. Elements are tubular, plastic impregnated cartridge, bearing evenly-distributed diatomaceous earth.

**Employment Service**—For the chemical profession, with headquarters in Washington, D. C., and offices in New York, Atlanta, Boston, Chicago, Houston and San Francisco, opened and directed by American Chemical Society. The regional service will function throughout the year as a liaison agency bringing together employers and scientists and student affiliates. In charge: Washington, Alden H. Emery, national secretary; New York, Dr. Walter Baer; Boston, Dr. Chester M. Aiter; Atlanta, Dr. W. M. Spicer; Chicago, Dr. Marvin J. Hall; Houston, Dr. W. O. Milligan; San Francisco, Dr. Sterling L. Redman.

**Fire Retardant**—Product of E. I. du Pont de Nemours & Co., Wilmington, Del., designated "CM" and "C", renders treated articles to a condition in which they will char, carbonize, and disintegrate upon ignition, but will not support combustion or propagate a flame. Articles so treated are said to not irritate the skin.

**Forged Gaskets**—For valves, valve bonnets and flange connections are now manufactured by The Steel Improvement & Forge Co., for high pressure and high temperature pipeline use. Forged of different metals to meet different requirements; available in oval and octagon types, wide range of sizes, including standard API standard sizes.

**25-Cycle Electronics**—Consisting of 25-cycle operation strip chart electronic potentiometer, introduced by Brown Instrument Co., Philadelphia, subsidiary of Minneapolis-Honeywell Regulator Co., and designed to meet special conditions in steel processing operations; supplied in standard speed, single and multiple models; available with standard thermocouple actuators or radiation variations, as well as with auxiliary contacts.

**Aluminum Refrigerator Car**—Introduced for try out at McComb, Miss., by Illinois Central Railroad, in collaboration with Aluminum Company of America and the car construction committee of Association of American Railroads. Net weight saving approximates 14,000 pounds. The car features forced-air circulation, electric lights and synthetic rubber seals for ice-loading hatches.

**Rotary Hand Pump**—New in design, embracing aluminum rotor, graphite carbon vanes and stainless steel springs; Produced by Industrial Pump Division, Bowser Inc., Fort Wayne, Ind. Furnished as pump only or as barrel pump with suction pipe, bung attachment and spout, or complete refueling unit with discharge pipe, combination hose holder and vacuum breaker, gasoline hose and aluminum nozzle; 10 g.p.m. capacity.

**Cutting Oil**—Known as Texaco Soluble Oil Heavy Duty, developed through research by The Texas Co., reported to have excellent cooling properties, combined with high speed cutting characteristics.

**Textile Chemicals**—New line being introduced by Monsanto Chemical Co., St. Louis, including: Resloom, a melamine resin which imparts to rayon, cotton and wool fabrics shrink-retarding, muss-resisting and long-life qualities; Syton, a colloidal silica which anchors threads to prevent runs and slippage; a new water repellent; mildew resistant agent; an organic amide against moths; a fire inhibitor and a sudsless soap detergent.

**Precision Vise**—Designed for die, gage and fixture drilling and grinding work, product of

Machinists Tool Co., Chicago 12; drive-wheel movement with 2 3/4-inch lateral clearance; double swivel construction, for setting to horizontal positions; adaptable for use on grinders, drill presses and for bench applications; made plain, plain swivel base, air production; available with 3/4 or 1 1/4 inch jaw sizes; swivels 360 degrees on base and has 90-degree vertical angle adjustment.

**Machine Shop Units**—Walker-Turner Co., Plainfield, N. J., will preview at the New York City Power Show, Dec. 2 to 7, three new machines: The 16-inch band saw, equipped with variable speed unit and mechanical feed; new 20-inch power feed drill press with feeding mechanism built in; drill press, 15-inch, redesigned for increased travel capacity; all scheduled for production in 1947.

**Modernized Boxcars**—To be built at Pennsylvania Railroad's Altoona shops; 1,100 in all; 100 to be specially equipped, with interior length, 60 feet, 20 feet longer than standard, adjustable shelves, racks and bulkheads; remaining 1,000 will have inside length of 50 feet and 500 will have double doors for easy handling of bulky materials such as automobiles.

**Condensing Units**—For use in refrigeration equipment, announced added to line of products by Jack & Heintz Precision Industries Inc. The new units are open type, supplementing hermetic types announced by the company recently. Production of the new units is expected to get underway soon after the first of the year.

**Cutting Material**—Called "Vasco Supreme," patented and announced by Alloys Steel Co., Latrobe, Pa. Described as being of high carbon content, resulting in increased wear resistance. Five per cent vanadium is added to prevent brittleness. Suggested by its makers for use on Bessemer screw stock, cold rolled, cast alloy, hard cast iron, high carbon steels and chromium tool steel.

**Stamping Machine**—Developed by Aeromark Co., Elizabeth, N. J., called Aeromark No. 1AR, is about the size of a No. 3 Arbor Press, with similar construction. Lettering and numbering head is set in the lower end of the ram, in double-row, and indexing arrangement at back of head directs positioning of characters. Gear and rack ram is adjustable by means of handwheel, to permit marking parts ranging from paper thickness to nine inches.

**Spray Washer**—Flat conveyor type, product of Optimus Equipment Co., 215 Church St., Matawan, N. J., designed to spray parts handled in baskets, on racks, or laid on conveyor. Special parts can be positioned if necessary. Alkaline, acid, solvent type, air drying, oil spray and similar operations included among suggestions for use. Features long horizontal tunnel on top of series of solution tanks. Continuous flat conveyor runs the length of the tunnel.

**Concentricity Determinator**—To be marketed by Swanson Tool & Machine Co., Erie, Pa., under the name Swanson V-Liner, is designed to facilitate concentricity checking, internal and external, on parts having varying diameters. The purpose is accomplished by turning a compensated screw which raises vertically adjustable V blocks on the instrument and thereby determines proper center line heights required for any combination of diameters involved. Available in sizes to handle diameters 1/4 inch to 6 inch, and 1 inch to 24 inch.

**Power Unit**—Developed by Link-Belt Co., Chicago 1, called Electrofluid Drive, available in horsepower up to 20. Consists of A. C. induction motor, flange mounted on housing containing a hydraulic coupling. Output shaft may be direct-connected to driven machine by chain, gear or belt drive. Fluid coupling between motor and load serves as automatic clutch, with fluid acting as cushion.

**Production Started**—Industrial Pump Division, of Bowser Inc., Angola, Ind., has taken over the company's plant there and is turning out new Bowser hand pumps, according to announcement by J. B. Trotman, general manager of the pump division.

## Personnel

**Dr. Willard H. Dow** of Dow Chemical Co., together with top officials and executives of large chemical and plastics companies, spent several days recently in a tour of Chicopee Manufacturing Corp.'s new plant at Cornelia, Ga. The plant occupies 330 acres, employs several hundred persons, and is the nation's first factory designed exclusively for production of plastic insect screens and fabrics. Dow Chemical Co. is a supplier of raw materials for the operation, consisting of extruded vinylidene chloride monochloride. Accompanying Dr. Dow were Dr. C. J. Strosacker, Dow vice president; Ray H. Boudry, manager of the plastics division; Donald L. Gibb, manager of plastics sales; William C. Goggin, manager plastics development; Wilson F. Barnes, vice president New York Wire Cloth Co.; Robert P. Turner, manager of manufacturing; Ephraim Winer, president; John J. Wagner, sales manager; Lee Sammler, technical director; Jerry Salkin, production director; and Karl Flocks, counsel, National Plastics Products Co., Odenton, Md. Chicopee officials who welcomed the visitors: N. L. Smith, board chairman; G. O. Lienhard, president; J. C. Platt, manufacturing manager; H. H. Purvis, manager Cornelia plant; W. J. Holman, Jr., vice president Lumite Division; George H. Day, screen cloth sales manager; J. F. Nicholl, upholstery and fabrics manager; J. F. Rohs, industrial fabrics manager; H. J. Studney, export manager and J. W. Veeder, advertising manager.

**S. A. Newman**, recently a captain in the Navy, is now chief turbine lubrication engineer of Gulf Oil Corp., headquarters, Pittsburgh. Captain Newman received his mechanical training at Texas A & M College. He joined Gulf first in 1930.

**Karl P. Hughes** is announced as district traffic and sales manager, United Air Lines, Washington, D. C., headquarters Statler Hotel and 808 15th St. N.W. After joining United in 1937, he became assistant to his present position in 1945 and served in that capacity until his recent promotion.

**Arthur J. Tuscany**, commissioner, Metal Lath Manufacturing Association, since 1941, is resigning to establish the Arthur J. Tuscany Organization with offices in Engineering Bldg., Cleveland 14. The new company will act as manager of national trade groups. Mr. Tuscany will be succeeded in the Metal Lath Association by Donald R. Wadle, Pacific Coast representative who is transferring to the Cleveland headquarters.

**James Gillespie**, 1330 Hollywood St., Dallas, has been appointed sales representative in Texas, Oklahoma, Arkansas and Louisiana, for Flexible Steel Lacing Co., Chicago 44, manufacturers of Alligator, Flexco and Flex belt fasteners and cutters. Mr. Gillespie, who attended Texas Agricultural and Texas A & M colleges, succeeds his father, the late J. W. Gillespie, who covered the same territory for eight years.

**William Naden**, former general superintendent, Baltimore Esso refinery, has been named a director of Standard Oil Co., of N. J. When made chief of the Baltimore unit in 1943, Mr. Naden directed completion of new installations which played a prominent part in the wartime aviation gasoline program. During the war he served as Petroleum Administrator for District 1. He is also head of the company's employee relations department.

**O. K. Wright**, in the service of Ahlberg Bearing Co., Chicago, for 25 years, will continue as branch manager of the firm's new quarters in Kansas City, which afford room for additional expansion. The area served by Mr. Wright's office includes Kansas, Oklahoma, and a large part of Missouri.

**G. J. Fink, Ph.D.**, is announced as new executive secretary of The Oxychloride Cement Association, with offices at 1028 Connecticut Ave., Washington 6, D.C., phone, National 6956.

**William T. Webster**, recently manager Brunswick Pulp & Paper Co., Brunswick, Ga., is now assistant general manager, National Container Corp., Jacksonville, Fla. (Continued on page 32)



# News from Industry

## Personnel

(Continued from page 51)

**Texas Oil Co.**, 8 Spartanburg St., Greenville, S. C., has been appointed distributor for Davey Compressor Co., Kent, O., as announced by Paul H. Davey, president. Texas Oil Co. will represent Davey in Greenville, Oconee, Greenwood and Pickens counties, South Carolina. Products include portable and stationary compressors, truck power take-offs, auto-air and track-air units, mobile machine shops, power saws and portable lighting equipment.

**Edward O. Snow and Charles G. Johnston** have been promoted by Ford Motor Co., announces J. R. Davis, Ford vice president in charge of sales. Mr. Snow steps up from sales representative to assistant manager, in the St. Louis district, and Mr. Johnston moves from sales manager to assistant district manager at Chester, Pa. Mr. Snow, a native of Campbellton, Mo., has been with Ford since 1939; Mr. Johnston, a Pennsylvanian, has served with the company since 1929.

**Lewis H. Brown**, president since 1929 of Johns-Manville Corp., New York 16, has been elected chairman of the board and chief executive of the company. R. W. Lea, vice president for finance since 1939, is now president. Alvin Brown has been elected vice president for finance, and John Syme, vice president, assistant to chairman of the board. The company has been organized into six operating divisions, with the chairman of the board directing general policy and external relations, and the president responsible for administration, current operations and internal relations. Divisions conform to products and comprise industrial insulations, packings, refractories, electrical products, friction materials, asbestos-cement pipe, building materials, with the complete line including 1,200 products.

**I. N. Moseley** has been made research and test engineer for Norfolk & Western Railway Co., succeeding H. W. Coddington, retired. Others participating in promotions: W. S. Garrett, H. B. Robinson, C. Reinhard, G. W. Meredith, J. L. Snow, D. E. Grayson and P. A. Graham.

**T. J. Flynn** has resumed duties at the Jacksonville, Fla., office of American Lumber and Treating Co., after 48 months' military service. An engineering graduate of Georgia Tech, he was commissioned in the Army Reserve. Recently he made a survey of operations at the wood preserving plant of the company at Gainesville, Fla.

**Sumner R. Cahoon**, effective Oct. 1, became vice president in charge of container operations for Robert Gair Co., New York 17. Concurrently, Norman F. Greenway became vice president in charge of folding carton operation. Mr. Greenway recently resigned as a director of the company.

**Francis J. Curtis**, vice-president of the Monsanto Chemical Co., St. Louis, has been elected chairman of the division of industrial and engineering chemistry of the American Chemical Society for 1946-47. He succeeds Thomas H. Chilton, director of the technical division of the engineering department at the E. I. du Pont de Nemours & Co. experimental station in Wilmington, Del. Mr. Curtis is a former chairman of the American Section of the Society of Chemical Industry. Dr. H. F. Johnstone of the University of Illinois was chosen vice-chairman of the Industrial and Engineering Division, and Dr. William A. Pardee of the Gulf Research and Development Co., Pittsburgh, was re-elected secretary-treasurer.

**Roger L. Dixon**, Dallas, Tex., has been appointed by the U. S. Dept. of Agriculture to facilitate the government's cotton and export and textile production program in Germany. Approximately 55,000 bales of American cotton have been landed in Germany to date and plans call for landing an additional 100,000 bales by the end of the year. Mr. Dixon is vice president of American Cotton Shippers Assn., and former president Dallas Cotton Exchange and Texas Cotton Association.

**Dr. James F. Bourland and J. W. Dykes** are recipients of important appointments in the

organization of Calco Division of American Cyanamid Co., Bound Brook, N. J. Dr. Bourland, born in Fort Smith, Ark., has been made chief chemist in the pharmaceutical department, Willow Island Works, West Virginia. He graduated from University of Arkansas in 1936 and received degrees, M.S. and Ph. D. later at Purdue. Mr. Dykes, native of Salisbury, Md., is a graduate of Washington College, and was formerly production superintendent of E. C. Klipstein Co., South Charleston, W. Va., transferring to Bound Brook when Calco bought the West Virginia plant in 1933. Also promoted was Dr. Harold Talbot Lacey of Binghamton, N. Y., who has been made senior chemist at Willow Island. Dr. Lacey, graduate of Cornell, spent a year abroad in post graduate work and was awarded an industrial fellowship to Mellon Institute. He joined Calco in 1932.

**Andrew L. Harris**, a native of Kansas City, has been appointed executive secretary of Producers' Council, national organization of building material and equipment manufacturers, it is announced by Tyler S. Rogers, Council president. Mr. Harris leaves the Eagle-Pitcher Sales Co., Cincinnati, where he has been manager of sales promotion for the past two years. He will make his home in Washington, D. C., headquarters of the Council.

**H. J. Hooker**, former chief of production for Chicago Engineer Procurement District, and recent regimental commander in Europe, has been appointed general plant manager, C. R. Jahn Co., Chicago, manufacturers of heavy duty low bed trailers. Before the war he was chief inspector for Chicago district of U. S. Engineer Dept.

**R. J. Rice**, formerly metallurgist with Beaumont Iron Works Co., Beaumont, Tex., then with Metal Goods Corp., and later with War Production Board, is now with International Nickel, Development and Research Division, Houston, Tex. Mr. Rice's division will furnish technical information and assistance on alloys containing nickel, in Texas, Oklahoma, Louisiana, Mississippi and southern Arkansas.

**Roland Wilbur**, at one time associated with Crossett Paper Mills, Crossett, Ark., has joined Southern Paperboard Corp., Savannah, Ga., as manager of manufacturing.

**C. B. Dodson** has been elected vice president, H. K. Porter Co., Pittsburgh 22, formerly chief industrial engineer, Jones & Laughlin Steel Corp., he will supervise operations of the seven Porter manufacturing plants.

**Louis V. Sutton Jr.**, is announced as methods engineer of Edwards Co., Sanford, N. C. by H. K. Smyth, vice president. Mr. Sutton, a native of Raleigh, was recently released from the Navy in which he served as Fire Control Repair and Maintenance Officer at Norfolk Naval Yard. He is a graduate of University of North Carolina. Edwards Co., manufacturer of machines and machine parts, is an affiliate of R. B. Rogers Companies Inc., New York.

**Reginald C. Smith**, for the past three years project manager of wartime operations for The H. K. Ferguson Co., Cleveland-New York-Houston, has been promoted to the position of contract manager, eastern district, with offices in New York. Before joining the Ferguson company, he was project engineer for Ford, Bacon & Davis Inc., and worked in an executive capacity at two large ordnance plants.

**P. J. Aquilino and Henry J. Shuster** have been raised to assistant managerships in the Washington and Philadelphia branches respectively of Ahlberg Bearing Co., Chicago, as announced by C. W. Pearsall, company vice president. Mr. Aquilino, a semi-pro ball player, has been with Ahlberg since 1928; Mr. Shuster joined the firm from the Navy where he served as pilot in Aleutian air service.

## Obituary

**Edward C. Singler**, 55, of 9632 Bell Ave., Chicago, died recently in Billings Hospital. He had been secretary of the Maple Flooring Manufacturers Association, 332 S. Michigan Ave., Chicago, a position he had held many years. Mr. Singler is survived by Mrs. Singler and two daughters.

## Trade Literature

**"Machines in the Cotton Fields"**, published by Southern Regional Council, Atlanta, discusses the rapidity of mechanizing activity on Southern farms and the possible displacement of numbers of present farm workers. The Council has urged Southern governors to call a conference to study the situation.

**"Texas Opportunities"**, issued by Texas Power & Light Co., to industrialists and bankers, shows in pictorial form the "empire that is Texas." It includes opening remarks by John W. Carpenter, president of the company, and articles on agriculture and major industrial activities in Texas.

**Catalog** — Issued by The Library of Industrial Research, 415 N. Dearborn St., Chicago 10, comprises a list of problems for industry with which the organization has dealt. The institution is a non-profit organization with its described purpose being to act as clearing house for the exchange of technical, scientific and management information. The catalog gives the prices of the treatises listed.

**Catalog** — No. 1461, on steam condensers by C. H. Wheeler Mfg. Co., Philadelphia; illustrated in 43 pages with general descriptions of various types of condensers in present day use; also conversion tables, and calculations affecting valve sizes, leakage and related subjects.

**Lending Directory** — Published by Consumer Credit Committee of American Bankers Association, brings together the names of 10,000 banks, located in all sections of the nation, which make installment loans to finance dealers and individual purchasers of durable goods and services. Available at cost, the directory of 300 pages is designed for use by member banks, manufacturers and other banking customers.

**"Ropeology"** — A folder by MacWhyte Co., Kenosha, Wis., affords a collection of wire rope users' experience plus suggestions for wire rope application in various types of service.

**Tool Catalog** — J. K. Smit & Sons, Inc., Dept. DT, 15 Chambers St., New York 7, available to interested users of diamond tools through request on professional letterhead, deals with questions: What are important factors in diamond tool buying? What kind of tools prevent injurious overheating? What device prevents wasteful overwork of diamonds?

**Peanuts** — Information in a series of treatises by National Peanut Council, Atlanta, describes manufacture and use of peanut protein, peptization of peanut and cottonseed proteins, together with recent development in the peanut processing field.

**"Magic in Agriculture"** — Title of a new movie dealing with the story of farm chemistry, is described in October issue of Ethyl News, published by Ethyl Corp., 405 Lexington Ave., New York 17. The movie, like its predecessors, is designed for farmers, farm equipment dealers and other groups with a stake in agriculture.

**"Farming for the Factory"** — Subject of article in October Harvester World, by International Harvester Co., Chicago; tells how applied science creates new crops, new uses, and uses of "wastes" in industry.

**"Metallurgy"** — By Carl G. Johnson, published by American Technical Society, Chicago, price \$5. A presentation in simple manner of the available knowledge concerning the manufacture and behavior of the many metals and alloys in use in modern civilization. Chapters: Properties of Metals and Tests to Determine Their Uses; Chemical Metallurgy; Producing Iron and Steel; Physical Metallurgy; The Theory of Alloys; Shaping and Forming Metals; Bearing Metals; Light Metals and Alloys; Copper and Its Alloys; Steel—Man's Servant; Heat Treatment for Steel; Surface Treatments; Alloy or Special Steels; Classification of Steels; Cast Iron; Powder Metallurgy. Contains reference index; 418 pages.

## Industrial Development Unit Organized at Oklahoma City

With a capitalization of five hundred thousand dollars subscribed to by business and civic leaders, Oklahoma Industries, Inc., has been organized at Oklahoma City to aid business concerns seeking factory sites, buildings and warehouse space.

First projects of the new organization include development of two large tracts—one of 160 acres and another of 60 acres, served by the Santa Fe and Rock Island railroads—which are designed to become the most modern factory and warehouse areas in the Southwest.

The organization is incorporated under a broad charter, which makes it possible to buy and sell subdivisions, built or rebuild warehouses and factories, advance money for plant construction or operation of a business, etc., not only in Oklahoma City but anywhere in the entire state.

"Oklahoma City, by a heavy margin, is the largest wholesale distributing center in the state," said Oscar Monrad, head of the Industrial Department of the Oklahoma City Chamber of Commerce, "Primary wholesale trade territory includes Oklahoma and portions of Texas, New Mexico, Kansas and Arkansas. In transportation Oklahoma City is served by three major commercial airlines, five steam and one inter-city electric railroad, ten bus lines and seventy-eight common-carrier truck lines, in addition to contract and private carriers."

"Consumer sales in Oklahoma City, based on the 2 per cent consumer tax, are over \$200,000,000 a year," he continued.

"Support for manufacturing is reflected in an income of over \$8,000,000,000 in the 8-state Southwest."

With more than one thousand top-ranking leaders in every phase of the aviation industry present, Oklahoma City held the fourth annual National Aeronautical Clinic on October 14-17.

Sponsored by the Oklahoma City Chamber of Commerce, originators of the plan, this clinic touched upon every phase of aviation from parts manufacturing to airport operations.

Six clinic sessions were held in chambers of the Oklahoma House of

Representatives, with officials of Civilian Air Board, National Aeronautics Association, air transport associations, aeroplane manufacturers, air field operators, mayors, educators and famous fliers taking part.

Lt. Gen. James H. Doolittle, other high-ranking army and navy officers, twenty-one delegates from foreign countries and a score of famous aviation writers attended the sessions.

Plans are already under preparation for the fifth annual session, which will again be held at Oklahoma City.

## Clarence Burch New Head of Oklahoma Resources Board

Clarence Burch, a native Oklahoman, is the new chairman of the Oklahoma Planning and Resources Board. Born in Indian Territory in what is now known as Johnson County, Mr. Burch grew up on a farm in western Oklahoma. He is a graduate of Oklahoma Agricultural



Clarence Burch

and Mechanical College and did graduate work at Washington State College. In addition to serving 12 years as agricultural agent for Tulsa, Harmon and Cleveland counties, Mr. Burch was director of the division of water resources of the Oklahoma Planning and Resources Board for two years.

"The planning and development of our natural resources — soil, water, minerals and forests — is most important," says Mr. Burch, "because from these resources we increase wealth. Oklahoma offers in-

dustry an abundance of natural resources, cheap power, excellent transportation, the best of labor conditions and year-round climate. Our climate and water development program gives us an opportunity for year-round recreation and sports."

## Norfolk and Western Receives Certificate of Achievement

The Norfolk and Western Railway last month received a "Certificate of Achievement" from the United States Navy "in grateful recognition of outstanding services to Naval personnel during World War II."

The highest award which the Bureau of Naval Personnel can give to an individual or organization not affiliated with the Navy, the certificate was presented by Admiral Louis Denfeld, who will assume command of the Pacific fleet next January. It was accepted by R. H. Smith, N. and W. president, on behalf of the railway and its employees.

At the same time, Admiral Denfeld presented a citation addressed to W. J. Jenks, N. and W. Board chairman and president of the railroad during the war years, for "the untiring devotion, sure knowledge and great patriotism of Mr. Jenks and his colleagues."

The citation pointed out that the railroad president and his organization "contributed to the greatest manpower movement in our country's history . . . the transportation of more than seven million naval personnel to points within the United States." Praising the railroads' accomplishments during the demobilization period, the citation said that "from August 14, 1945 to August 31, 1946, while the Navy returned more than three million men and women to civilian life, travel of Naval personnel reached stupendous proportions." About 40 other railroads and the heads of four regional railroad passenger associations have been cited by the Navy for their outstanding jobs during the war.

In addition to Admiral Denfeld, other high ranking officials on the luncheon guest list included Under Secretary of the Navy John L. Sullivan; Rear Admiral J. L. Holloway, Jr., assistant chief of Naval Personnel and recently appointed superintendent of the United States Naval

(Continued on page 54)

## Norfolk and Western Receives Certificate of Achievement

Academy; Colonel J. Monroe Johnson, director of the Office of Defense Transportation; John J. Pelley, president of the Association of American Railroads, and Hugh W. Siddall, chairman of the International Military Committee.

## Texas Casting Company Operates Modern Plant

**I**N HOUSTON is located the modern foundry of the Texas Electric Steel Casting Co., a company which had its beginning nearly 20 years ago with a few dozen employees, and which today employs approximately 325 workers.

Tesco, the name by which this company is known, produces both carbon and alloy steel. Since the foundry uses electric furnaces where the steel scrap is melted under the arc, the product is called electric steel. The process is essentially a refining process and the basic raw material is steel scrap. Houston has occupied a very fortunate position as a source of good scrap steel, thus TESCO finds its raw material in its own back yard.

Most of the castings go to the oil industry and this company is proud to be the world's largest producer of oil field castings. Other industries served by Tesco castings include cement mills, trailer builders, agricultural equipment manufacturers, shipbuilders, sand and gravel producers, dredge operators and contractor equipment manufacturers. During the war this company made thousands of tons of castings for the Army, Navy and Maritime Commission. The Tesco hallmark could be seen on every fighting front on ships, tanks and guns.

Texas Electric Steel Casting Co. is strictly a jobbing foundry, producing no completely finished and assembled products. All of its efforts are devoted to making castings from patterns furnished by its customers.

Tesco castings meet the demands of the deepest wells where the extremely high pressures are encountered. Pressures running as high as 15,000 pounds per square inch are being used to test equipment going into Christmas trees and blow-out

preventers for these deep wells. In order to produce steel which will stand up under services such as this, TESCO employs the most modern methods of quality control.

The laboratory, which operates on a 24-hour basis, is the nerve center of this closely watched system. In the chemical laboratory samples are taken from each heat of steel. These samples are analyzed to make sure that the heat conforms to the correct chemical specifications. In addition to the final analysis, the chemical laboratory makes preliminary tests of carbon and manganese while the metal is still in the melting furnace. This very important control aids the melter and practically insures him of coming out with a heat which will be within the prescribed analysis range. This test is made in three to five minutes.

In the physical testing laboratory samples of each heat are machined and these test bars are "pulled" on the latest type Baldwin Southwark hydraulic testing machine. This test determines the important physical characteristics of the steel, such as yield point, tensile strength, elongation and reduction of area. The internal structure of the steel is also studied under the metallographic microscope in this laboratory. It is here that the heat treatment is closely watched.

Since sand control is so important in the foundry a separate laboratory is devoted to sand testing. Here batches of sand are constantly being tested to insure uniformity.

At Tesco one may see one of the finest and most up to date heat treating departments. Here the alloys, which are added to the steel, are put to work. Only by heat treatment can the fullest benefit be obtained from these alloys. Batteries of hardening and draw furnaces are lined up on each side of the quenching tank. The temperature of these furnaces is automatically controlled by recording pyrometers. Large car-type annealing furnaces capable of handling a piece 25 feet long and 9 feet wide are used in the treatment of the carbon steel castings. These furnaces may also be used for stress relieving. Tesco has done many stress relieving jobs for refineries on heat exchanger shells, intricate pipe bends and fabricated structures.

The molding floor of the foundry is equipped for production molding on molding machines as well as for single floor made molds. Roller conveyors carry the sand to the various molding machines. After the sand is used it goes through a re-conditioning unit.

President of Tesco is T. H. Shurtle, who has held this position since its formation. J. W. Link, jr. is vice president and F. M. Wittlinger is sec. treas.

## Southern Insurance Company Begins Nationwide Expansion

The Industrial Life and Health Insurance Company, a multimillion dollar business with principal offices in Atlanta, has announced a broad expansion program, first step in which will be the establishment of headquarters in four additional states.

This company, which within recent years has become one of the most rapidly growing life insurance firms in the nation, will set up new headquarters in Raleigh, N. C., Richmond, Va., Lexington, Ky., and Baton Rouge, La. The expansion program, J. N. McEachern, president, said, "represents a substantial step in the direction of the current trend to keep Southern money in the South, working for Southerners."

The company, with an excess of 3,000,000 policyholders, has an annual income from premiums of more than \$25,000,000. Its assets total more than \$22,000,000, and Mr. McEachern said nearly all of this amount is invested in Southern securities.

Eventually, the company plans to broaden its operations on a nationwide scale. It has experienced astonishing growth in recent years, and last year the increase in premium income was more than \$4,000,000 above such income in 1944. Thus far in 1946, Mr. McEachern reports, the rate is even greater in this respect than that of 1945 over 1944.

Concerning the expansion, Mr. McEachern said: "An ever-widening field of economic thought holds that basic, healthy prosperity for the South must be built on the bedrock of Southern capital, and our steadily increasing financial reserves provide the capital for investments in Southern business and jobs."

(Continued from page 53)



# NEW AND EXPANDING PLANTS

(Continued from page 8)

**ST. LOUIS**—Control Room—Pulitzer Publishing Co., 1111 Olive St., let contract to Westlake Construction Co., Railway Exchange Bldg., for penthouse for radio control room, cost \$19,000.

**ST. LOUIS**—Warehouse—George F. Smith, 5215 Manchester, let contract to Fruin-Colnon Contracting Co., 1706 Olive, for steel quonset hut, for warehouse; 40x120.

**ST. LOUIS**—Repair Shop—Terminal Rail Road Assoc., 1800 Market St., will erect one-story repair shop at 115 S. 20th; cost \$27,000.

**SPRINGFIELD**—Facilities—St. Louis-San Francisco Railway, Frank A. Thompson, trustee, plans expenditure of approximately \$5,000,000 in expanding and improving present yard facilities.

## NORTH CAROLINA

**ASHEBORO**—Furniture—Randolph Furniture Co., Inc., incorporated with Gilbert Councilman, and Assoc., capital stock \$100,000; deal in furniture.

**ASHEBORO**—Hosiery—Auman Hosiery Mills, Inc., incorporated with Howard Auman and Assoc., capital stock of \$100,000; to manufacture hosiery.

**BLACK MOUNTAIN**—Hosiery—Mid-West Hosiery Company, incorporated with J. L. Hoffman, Sr. and Assoc., capital stock of \$50,000; deal in hosiery.

**CANTON**—Paper Mill—Champion Paper & Fibre Co., contemplates construction of \$90,000 paper mill.

**CHARLOTTE**—Spinning Mill—Bynum and George Corporation, incorporated with W. M. Nicholson and associates, capital stock \$100,000; to maintain spinning mills.

**CHARLOTTE**—Mill—Lewith Mills, Inc., incorporated with Wilson Lewith and associates, capital stock, \$100,000; manufacture.

**CHARLOTTE**—Equipment—Baker, Mitchell Co., incorporated with C. A. Baker and Associates, capital stock, \$100,000; to buy and sell plumbing and heating equipment.

**CHARLOTTE**—Manufacturers—Panel Sales Co., incorporated with Braxton C. Wallace and Associates, capital stock \$100,000.

**CLAYTON**—Machinery—L. P. Miller, Philadelphia, acquired 10,200-spindle mill of Whitley Spinning Co., Clayton; installing new machinery.

**CONCORD**—Furniture—Maxwell Brothers and Collins, Incorporated with C. Roy Morris, and Associates, capital stock of \$100,000; furniture business.

**CONCORD**—Hosiery Mill—Hosiery Mills, Inc., incorporated with Floyd Shoaf, and associates, capital stock \$100,000; to manufacture hosiery.

**DURHAM**—Textile Products—Skyland Textile Company, incorporated with F. L. Fuller, Jr., and Assoc., capital stock, \$100,000; to deal in textile products.

**DURHAM**—Soft Drinks—Seven-Up Bottling Co. of Durham, incorporated with Lloyd W. Brown and Assoc., capital stock \$100,000; to manufacture and sell soft drinks.

**ELIZABETH CITY**—Building—Kramer Brothers Co., Inc., F. K. Kramer, Pres., plans reconstruction of Kramer Building.

**FOREST CITY**—Manufacture—Paul Doggett Dunbrik Co., Inc., incorporated with Paul Doggett, and Assoc., capital stock \$50,000; to manufacture and sell concrete products.

**GASTONIA**—Textiles—McCluney's Inc., incorporated with R. D. Moore and Associates, capital stock of \$50,000; to deal in textiles.

**GASTONIA**—Metal Parts—Textile Parts and Machine Co., incorporated with L. W. Cloniger and Assoc., capital stock of \$100,000; to manufacture iron and metal parts.

**GOLDSBORO**—Incorporation—Thompson Wooten Oil Co., Inc., incorporated with E. M. Thompson, capital \$200,000; deal in petroleum products.

**GRANITE FALLS**—Furniture—Granite Falls Furniture Co., incorporated with H. E. Tague, Morganton and Assoc.; capital stock of \$200,000; to manufacture furniture.

**GREENSBORO**—Addition—Carolina Steel and Iron Co., South Elm St., erecting steel fabricating department as addition to existing building.

**GREENSBORO**—Plant—Sedgefield Mills, Inc., Robert Baker, President, let contract to Brooks Lumber Co., for construction of \$12,500 building, 1819 Spring Garden Street; Brick and concrete, one story and 50x80; \$25,000 worth of equipment now on order; Company produces cotton, wool mixture and synthetic materials for women's outerwear.

**GREENSBORO**—Business—Lambeth Construction Co., incorporated with S. T. Lambeth and Associates, capital stock \$200,000; general construction and engineering business.

**HENDERSONVILLE**—Plant—Kalmia

Dairy, Inc., has CPA approval for \$100,000 pasteurization and milk processing plant.

**HENDERSONVILLE**—Manufacture—Craft Textiles, Incorporated with F. M. Michaelian and Associates; manufacturing business.

**HICKORY**—Manufacture—Hickory Springs Manufacturing Co., incorporated with P. C. Underdown, and Assoc.; capital stock of \$100,000; to manufacture and sell springs.

**HIGH POINT**—Manufacture—Junior Manufacturing Co., incorporated with Harold J. Waggar and Assoc., capital stock \$100,000; to manufacture.

**HIGH POINT**—Furniture—Crech Manufacturing Co., incorporate with William S. Crech, and Assoc., capital stock of \$100,000; deal in furniture.

**NEWTON**—Building—L. W. Pitts has CPA approval for construction of business building, cost \$10,000.

**OLD FORT**—Power Plant—Clearwater Manufacturing Co., has CPA approval for \$117,000 power plant for its textile mill.

**PAW CREEK**—Manufacture—G. and H. Textiles, Inc., incorporated with James O. Graves and Associates, capital stock \$100,000; manufacturing business.

**RALEIGH**—Plant—Burlington Mills Corp. of Greensboro, let contract for construction of a new dye works and finishing plant near Raleigh; will operate new unit as the Neuse River Finishing Mill.

**RUTHERFORD COUNTY**—Radio Station—Rutherford County Radio Co., Raleigh, plans to establish and operate radio station.

**SHELBY**—Furniture—Best Furniture Co., incorporated with Herman O. Best, and Associates, with capital stock of \$100,000; general furniture business.

**STATESVILLE**—Equipment—Statesville Daily Record, Inc., Mrs. C. E. Middlesworth, President, plans installation of new machinery as soon as possible; also plans enlargement of the size of the paper.

**SWEPSONVILLE**—Fabrics—Alatex Corporation, incorporated with Thomas D. Cooper and Associates; capital stock, \$100,000; to manufacture and sell fabrics of all kinds.

**THOMASVILLE**—Hosiery—Tate Hosiery Mills Corp., incorporated with Clem G. Tate and Associates; capital stock \$50,000; to manufacture men's hosiery.

**WADESBORO**—Expansion—West Knitting Corp., F. A. Huntley, President, plans enlargement of plant and development of other lines closely connected with the underwear industry.

## OKLAHOMA

**OKLAHOMA-TEXAS**—Pipeline—Phillips Petroleum Co., plans laying 12-inch crude oil pipe line from West Texas to Cushing, Okla., district.

**TULSA**—Radio Studio—Fred Jones Broadcasting Co., plans radio studios for Radio Stations KFMJ and KFMJ-FM; proposed building contains large theater, FM, standard and television studios, with offices, lounge and quarters for technicians.

## SOUTH CAROLINA

**ANDERSON**—Manufacture—Southern Farm Equipment Manufacturing Co., incorporated with J. Louie Black and associates, capital stock, \$10,000; manufacturing concern.

**BISHOPVILLE**—Textile—Culpepper Knitting Co., Inc., incorporated with Edwin M. Culpepper and Assoc., capital stock \$15,000; manufacture textile products.

**CHARLESTON**—Building—Hood-Myers Electric Co., let contract to C. W. Blanchard, for building.

**CHARLESTON**—Improvements—K-Slax Manufacturing Co., A. Kremer and J. Kalinsky, have leased space at Port Terminals; plans expending \$25,000 for improvements; manufacture men's pants.

**NORTH CHARLESTON**—Plant—Manhattan Shirt Co. of New York, has rented 60,000 sq. ft. of space in warehouse at North Charleston State port terminals; will be used for manufacture of pajamas, with shirts, underwear and other garments.

**CHESTER**—Broadcasting Station—Craig Broadcasting Co., 132 Main St., will probably let contract to Johns-Manville Corp., Johnston Bldg., Charlotte, N. C., for commercial standard (AM) broadcast station.

**CLARK HILL**—Power Plant—War Department Division Engineers, Savannah, Ga., Atlanta, Ga., plans complete new hydroelectric power plant at Columbia County and McCormick County, near Clark Hill; to cost approximately \$26,000,000.

**COLUMBIA**—Plant—Shakespeare Co., W. G. Balz, Vice-Pres., Kalamazoo, Mich., plans new plant, manufacturing glass fishing rods; plant will have modern fluorescent lighting equipment; V. L. Johannessen, Mgr.

**DILLON**—Plants—Carolina Mills, Inc., have acquired two mills of Carolina Textile Corp., Martin L. Cannon, Pres.; Corporation equipped with 27,000 producing spindles and ample twisting spindles to care for production.

**FLORENCE**—Bus Station—Union Bus Station & Queen City Coach Co., plans construction of 2-story brick and concrete bus station, estimated cost \$118,000; paved driveways and runways, barber shop, cafe, etc.

**LAURENS**—Addition—Fiske-Carter Construction Co., Spartanburg has contract for hosiery mill addition.

**PENDLETON**—Textiles—Blue Ridge Yarn Mills incorporated with T. Frank Watkins and associates, capital stock \$50,000; to

(Continued on page 56)

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# NEW AND EXPANDING PLANTS

(Continued from page 55)

manufacture textile products.

**ROCK HILL** — Plant — M. C. Goldberg, Philadelphia, Pa., has acquired Cutter Manufacturing Co., from J. H. Cutter Co., Inc., Charlotte, N. C.; equipped with 14,000 spindles and 415 looms.

**WALHALLA** — Manufacturing plant — Walhalla Development Co., let contract to General Construction Co., Palmetto Bldg., Columbia, for one-story garment manufacturing plant to be leased to Cotton Blossom Brands of New York; to cost approximately \$150,000.

## TENNESSEE

**BRISTOL** — Factory Building — Monroe Calculating Machine Co., contemplates construction of factory building, cost approximately \$1,000,000.

**CHATTANOOGA** — Nylon Plant — E. I. du Pont de Nemours & Co., F. H. Mackle, Construction Division Mgr., Wilmington, Del., appointed G. E. Bubb as field project manager for \$20,000,000 nylon yarn plant on 600-acre tract on north side of Tennessee River between Dixie Mercerying Co.'s Lupton City spinning mill property and Chickamauga Dam; main building will be a structure 748 feet by 324 feet of concrete, steel and masonry construction; mostly one-story in height with three-story section near one end; will be polymer, spinning and textile building with general office space; adjacent will be powerhouse building; electricity will be purchased from Electric Power Board of Chattanooga; will start work about November 1.

**CHATTANOOGA** — Shop — Southern Railway System, Washington, D. C., plans \$887,000 heavy repair and maintenance shop.

**CHATTANOOGA** — Expansion — Chattanooga News-Free Press, Roy McDonald, publisher, contemplates expansion and remodeling program and installation of new equipment, totaling \$750,000.

**COLUMBIA** — Expansion — Monsanto Chemical Co., William M. Rand, Pres., plans starting a phosphate mining operation at Dark's Mill, about five miles north of Columbia.

**DAYTON** — Plant — Iceland Gardens, Inc., have CPA approval for construction of frozen-food locker plant, costing \$60,000; Jack Frazier, President.

**GREENVILLE** — Plant — George C. Moore Co., Westerly, R. I., completed negotiations with Greene County Foundation for location of a new branch plant in Greenville; manufactures elastic webbing.

**GREENVILLE** — Expansion — Southern Garment Co., M. Stassio, general manager, plans expansion program; addition to be a duplicate of wing recently constructed.

**KNOXVILLE** — Radio Station — Rev. J. Harold Smith, has FCC permission to operate radio station.

**MEMPHIS** — Plant — Heyden Chemical Corp. of New York, Dr. R. W. Harris, vice president, has acquired plant of Southern Acid & Sulphur Co., and its 68-acre site at Jackson and Warford; plans \$500,000 expansion program.

**MORRISTOWN** — Plant — American Enka Corp., Asheville, N. C., erect a synthetic yarn plant; \$20,000,000 for the first unit.

**NASHVILLE** — Bus Terminal — Trailway Bus Depot, subsidiary of Consolidated Bus Lines, Inc., has acquired site on Sixth Ave., for erection of large bus terminal.

**SPARTA** — Laundry — J. B. Hunter and J. R. Cooper, plans construction of modern laundry.

## TEXAS

**TEXAS** — Plant — Stanolind Oil & Gas Co., Dallas, let contract to C. F. Brann Co., Los Angeles, Calif., for 90,000,000 foot daily capacity natural gasoline plant in Slaughter field of West Texas.

**TEXAS** — Pipeline — Frank Phillips, Chrmu, and K. S. Adams, Pres. of Phillips Petroleum Co., have announced that Standish Pipe Line Co., a wholly-owned subsidiary, has completed plans to build 280 miles of 12 inch crude oil line from Goldsmith to Borger.

**ALICE** — Ice Plant — Civilian Production Administration approved application for \$27,630 Central Power & Light Co. ice plant at Alice.

**ARANSAS PASS** — Plant — Gulf Coast Industries, Inc., started work on construction of a quick-freezing plant at Conn Brown Harbor for processing shrimp and fish on a commercial basis.

**AUSTIN** — Bottling Plant — Superior Dairies let contract to R. H. Folmar, 205 River-

side Dr., at approximately \$130,000, for milk bottling plant to adjoin present ice cream plant at 608-610 E. First St.

**AUSTIN** — Warehouse — Texas Building & Equipment Co., 6701 Georgetown Highway, started work on construction of one-story strand steel quonset hut, 700 Block Georgetown Highway, cost approximately \$10,000.

**BOWIE** — Building — Edwards Motor Co., Fort Worth, started work on construction of one and two-story auto building, cost approximately \$35,000.

**CORPUS CHRISTI** — Plant — Ed Nordhaus, San Antonio, let contract to E. Eisenhauer, Alameda Estates, for foundation work, electrical, plumbing and finish work for a frozen food locker plant, 1201 N. Tancanua Street; General Supply Co., Corpus Christi, will furnish and erect a quonset hut building for the plant.

**CORPUS CHRISTI** — Warehouse — J. E. Ingram Equipment Co., Otto Dukes, Representative, has plans in progress for construction of warehouse.

**DALLAS** — Warehouse, Etc. — Work started on construction of one-story warehouse and depot building, 2017 Young Street, cost \$10,000.

**DALLAS** — Warehouse — Leland Hodges let contract to McEdden & Underwood, 4000 Terry, for addition to present warehouse, 2517 Oakland, cost \$10,000.

**DALLAS** — Plant — Marvin Lunsford plans plant, estimated cost \$100,000; fireproof; one-story, 110x150; equipment to cost \$75,000.

**DALLAS** — Felt Mill — Southwest Building Products Co., C. B. French, vice-president, has CPA approval for constructing of factory building for manufacture of felt; includes pump house and boiler plant, cost about \$2,000,000; located Holmes St. Road and Millers Switch, 400x65.

**DALLAS** — Warehouse — Roddis Lumber and Veneer Co., Kansas City, Mo., has plans in progress for masonry warehouse building, Medill St. off Grand Ave.; steel frame and reinforced concrete, concrete foundation; cost \$75,000.

**DALLAS** — Building — Plans in progress for brick, masonry concrete and steel building at Oak Lawn adjacent to present building for Southwest Medical Foundation, Dr. Oscar Marchman, Pres.; cost approximately \$500,000.

**DALLAS** — Plant — Eastman Kodak Co., George R. Pollard, Mgr., Dallas Office, will start work soon on color processing plant and sales distribution office at Airlawn Industrial Park, facing Cedar Springs Rd.

**DALLAS** — Factory, Etc. — H. C. Potter, 2927 N. Henderson, let contract to John W. Taylor, 4329 McFarlin Ave., for construction of one-story warehouse and factory building, 5021 Willis Ave., cost \$12,500.

**DALLAS** — Building — Tidy Diddy Wash Service, 2009 N. Field St., let contract to H. Smith, Walnut Hill Estates, Dallas, for construction of one-story masonry laundry building, 2226 Butler Street, cost approximately \$14,000.

**DALLAS** — Factory — Ed. W. Smith, 760 Nolte St., let contract to N. L. Morris, 4511 W. University Street, for construction of one-story masonry factory building, 3109 Commerce St., cost approximately \$14,800; concrete foundation.

**DALLAS** — Warehouse — E. H. Perry, 2110 Corinth Street, let contract to A. J. Rife Construction Co., Dallas, for construction of masonry addition to present warehouse building, cost approximately \$60,000.

**DALLAS** — Building — F. A. Kadane, Pure Ice & Cold Storage Co., received bids for construction of ice and cold storage building, Harwood Street and Cadiz Street; concrete foundation; cork insulation.

**DALLAS** — Plant — Dallas Morning News, G. B. Denley, has plans in progress for construction of newspaper plant, Houston St.; brick, concrete and steel construction; concrete and tile floors; built-up roof, etc.

**DALLAS** — Building — Slocum Electric Co., Joe H. and Hugh Slocum, 1100 Cadiz St., plan two-story office building.

**DALLAS** — Repair Shop — P. E. Taylor, Olive-Taylor Co., Young St., let contract to Churchill & Barry, Construction Building, Dallas, for construction of one-story, masonry auto repair shop, 124 Greenville; concrete foundation, cost approximately \$14,000.

**EUREKA** — Expansion — Parkersburg Rig & Reel Co., A. Sidney Knowles, President, plans to treble size of the newly acquired Nowery J. Smith plant at cost of approximately \$2,000,000; company manufactures heavy equipment used by oil and gas concerns.

**FORT WORTH** — Building — Frank Maddox let contract to Andrews & Osborne, 3320 W. 7th Street, for construction of one-story garage building, 800 N. Lancaster Street; cost approximately \$17,500.

**FORT WORTH** — Mill — Tex-O-Kan Flour Mills Co., Jack P. Burrus, President, has work underway on \$1,000,000 fireproof feed mill north of Fort Worth; ten-story, fireproof; will have a capacity of 840 tons in eight hours.

**FORT WORTH** — Office Building — Elmer Woodbridge, 200 Houston Street, has started work on one-story, tile and concrete office building, 2519 W. 7th Street, cost \$10,000.

**GANADO** — Locker Plant — Central Power & Light Co., H. C. Locher, received bids for locker and frozen food plant.

**GARLAND** — Plant — Seiberling Rubber Co., Akron, Ohio, Lesses, received low bid of \$277,830 from T. C. Bateson Construction Co., 622 Irwin-Keasler Building, Dallas, for completion of Banbury building.

**GOOSE CREEK** — Warehouse and Office Building — Houston Lighting and Power Co., will build a one-story and two-story warehouse and office building on S. Pruet at American St.; to cost approximately \$100,000.

**GRANDBURY** — Building — Plans in progress for one-story masonry and steel auto building for Vaughn Motor Company; cost \$15,000.

**HARLINGEN** — Hardware Warehouse — Corpus Christi Hardware Co., let contract to J. A. Walsh, 1810 Palm Dr., for warehouse building for auto parts.

**HOUSTON** — Pipelines — The Texas Pipe Line Co., a subsidiary of Texas Co., plans to construct two major pipelines; estimated cost \$15,000,000; one line will connect Houston with Texaco's Port Arthur and Port Neches refineries; other to run between West Columbia and Houston; B. E. Hull, Pres.

**HOUSTON** — Shop Building — B. & J. Spring Co., Inc., let contract to G. R. Berry, 1415 Berry Road, for constructing one-story shop building, Bell Street at Jackson.

**HOUSTON** — Warehouse — Plans nearing completion for one-story masonry warehouse and office, 1505 Gentry St. for Anchor Post Fence Co. of Texas.

**HOUSTON** — Warehouse — Houston Belting and Supply Co. has plans nearing completion for one-story masonry warehouse.

**HOUSTON** — Addition — Southern Acid & Sulphur Co., LaPorte Road, let contract to Tellepsen Construction Co., 3900 Clay Ave., for repairs and addition to chemical plant, at \$23,671.

**HOUSTON** — Plant — Independent Oxygen Co., let contract to Meco Construction Co., for construction of oxygen plant, 501 Industrial W. W. 13100.

**HOUSTON** — Plant — Golden Age and Pepsi Cola Bottling Co., Joe Darsky, Pres., plans \$500,000 bottling plant on a two and a half acre site on Harrisburg Boulevard; \$250,000 worth of equipment now on order.

**HOUSTON** — Warehouse — M. Kruger, started work on construction of one-story warehouse, 2928 Commerce Street, cost approximately \$40,000.

**HOUSTON** — Building — Southwestern Construction Co., 4949 Rusk Ave., started work on construction of one-story office building, cost \$12,000.

**HOUSTON** — Plant — Eastern States Petroleum Co. plans refinery between Manchester Blvd. and Ship Channel; Duncan Neblett, Vice Pres.

**HOUSTON** — Refrigerator Cars — Southern Pacific Railroad, A. T. Mercier, Pres., has placed order for post-war refrigerator cars, costing \$37,500,000.

**HOUSTON** — Service — Southwestern Bell Telephone Co., J. B. Patterson, division Supt., plans mobile radio-telephone service, to cover United States highway 75 from Red river to Galveston; total cost of system, approximately \$1,300,000.

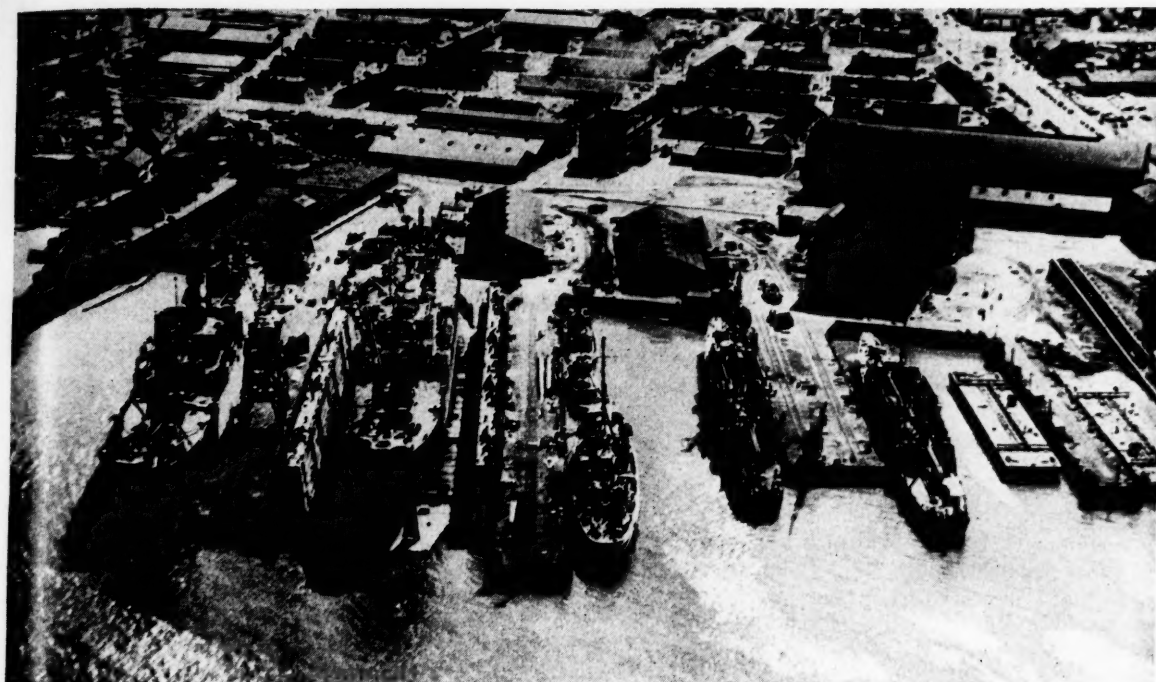
**HOUSTON** — Plant — National Biscuit Co., George H. Rhodes, Manager, Engineering Department, has plans started for constructing bakery plant, Alameda Road near Navy Hospital, cost approximately \$2,000,000; completely air-conditioned; includes 40,000 cu. yds. fill; plant to be approximately 1,136x270.

**HOUSTON** — Addition — Wyatt Metal & Boiler Works, W. Van Wart, Manager, let contract to Tellepsen Construction Co., 3900 Clay Ave., for construction of two-story, masonry office addition, Washington & M. K. & T. tracks.

**HOUSTON** — Plant — Diamond Alkali Co., John T. Richards, Pres., Pittsburgh, Pa., has CPA approval for additional facilities of \$33,440 at plant to be constructed soon on the north side of the Houston Ship Channel; estimated cost of the electro-chemical plant, \$6,000,000; Brown & Root Construction Co., general contractors at \$5,750,000.

**HOUSTON** — Expansion — Narration Milk Co., let contract to Thomas Tate & Sons, at \$300,000, for remodeling present Edmundson building.

(Continued on page 57)



Above—Charleston, S. C., Shipbuilding Plant taken over by Todd Shipyards Corporation.

## New and Expanding Plants

(Continued from page 56)

**HOUSTON** — Expansion — American Rolling Mills Co., and its subsidiary, Sheffield Steel Co., plans expenditure of approximately \$11,700,000 for expansion program; acquired government steel facilities in Houston.

**HOUSTON** — Addition — Southern Acid & Sulphur Co., LaPorte Road, received low bid of \$23,671 for repairs and addition to chemical plant, LaPorte Road; includes concrete foundation for new plant building; ammonium phosphate plant addition and general repairs to present plant.

**HOUSTON** — Warehouse — Commercial Music Co., 3300 Louisiana St., let contract to Schneider Construction Co., Houston, for construction of one-story warehouse, 3300 Louisiana, cost \$20,000; brick, concrete and hollow tile construction.

**HOUSTON** — Sack House — Trinity Portland Cement Co., let contract to E. Lee Bond, 3707 Ingold Street, for construction of one-story sack house, Navigation Boulevard, cost approximately \$10,000; concrete slab foundation.

**HOUSTON** — Foundation — J. B. Shapiro, 1103 Hemphill St., let contract to Webb Construction Co., for construction of reinforced concrete foundation for a one-story building, cost \$16,000.

**HOUSTON** — Expansion — Shell Chemical Corp., B. M. Downey, Plant Mgr., plans \$3,500,000 expansion program.

**HOUSTON** — Plant Facilities — Plans are in progress for construction of steel warehouse building, Clay Avenue for J. T. Thorpe, Inc.

**LIBERTY COUNTY** — Mining Facilities — Texas Gulf Sulphur Co., Moss Bluff, plans dismantling three one-story buildings and erecting two new buildings and additions to buildings; to cost approximately \$245,000.

**MINERAL WELLS** — Plant — Cannelton Sewer Pipe Co., Edward F. Clemens, Pres., Cannelton, Ind., announced plans for erection of the Texas Vitriol Pipe Company plant, cost approximately \$500,000; consist of large periodic kilns and one large continuous kiln on 43-acre site just outside of city limits.

**ORANGE** — Building — E. W. Brown, Jr., has plans in progress for construction of one-story hangar building, Orange-Port Arthur Highway, 100x120; and shop building, 60x50.

**PASADENA** — Addition — Champion Paper & Fibre Co., has plans in progress for construction of masonry, steel and concrete addition to present plant, to include equipment, cost approximately \$4,000,000.

**PORT ARTHUR** — Oil Distillery Plant — E. B. Badger & Sons, has contract for two, 20,000 B. P. D. atmospheric vacuum topping

units to distill crude oil, cost approximately \$1,000,000; Gulf Oil Corp., Charles R. Stevenson, Plant Mgr.

**RAYMONDVILLE** — Plant — Aztec Freezers & Canners have CPA approval for \$22,000 plant.

**SAN ANTONIO** — Building — Industrial Manufacturing Co., Carl Sohweers, Sec. Treas., 415 Carolina St., has CPA approval for factory building, 915-17 Roosevelt Ave.; 27,000 sq. ft.

**SAN ANTONIO** — Addition — Coca-Cola Bottling Co., 123 LaFitte Street, let contract to Baugh & Scott 1107 Frost Bank Building, for addition to present building.

**SAN ANTONIO** — Ice House — Harmon T. Davis has CPA approval for \$11,300 ice house.

**SAN ANTONIO** — Station — Howard W. Davis, c/o KMAC, National Bank of Commerce Bldg., plans FM transmitter station, St. Hedwig Road, 7 or 8 miles from San Antonio.

**SAN MARCOS** — Plant — Henry P. King, Jr., and John D. McIntyre, 323 Hopkins Street, has plans in progress by A. J. Kliefoth, 145 N. Street, San Antonio, Engineer, for construction of frozen food plant, South Guadalupe Street, cost approximately \$49,350.

**SHERMAN** — Expansion — Hardwicke-Elter Gin Manufacturing Co., Joe Elter, Board Chairman, plans expansion of production and erection of an additional plant building; manufacture of a cotton harvester for the John Deere Co., East Moline, Ill., will begin next spring; estimated cost \$100,000.

**TAYLOR** — Creamery — Drs. R. G. Garrett and E. W. Stromberg, let contract to W. T. Dungan, Manor, for one-story reinforced concrete and tile creamery for pasteurizing of milk at N. Main and Hossack Sts.; cost \$30,000.

**VALLEY MILLS** — Plant — Valley Mills Refrigeration Cooperative Inc., has funds to complete construction of refrigeration plant.

**VICTORIA** — Industrial Building — Crescent Valley Creamery, Jack Wayne, Mgr., has plans in progress for one-story reinforced concrete industrial building.

### VIRGINIA

**CLIFTON FORGE** — Station — Chesapeake & Ohio Railway Co., Cleveland, Ohio, has underway, enlargement of east yards and construction of coaling station, estimated \$300,000.

**DANVILLE** — Building — Franklin Turnpike Bus Co., has acquired lot for erection of a bus terminal, estimated cost approximately \$20,000.

(Continued on page 58)

## Todd Shipyards Corporation to Operate Charleston Yard

Todd Shipyards Corporation, which owns and operates six major repair yards on the Atlantic, Gulf and Pacific coasts, announced recently at its One Broadway offices, that the company will increase its service to ship owners by taking over operation of the Charleston Shipbuilding and Dry Dock Company of Charleston, South Carolina.

The Charleston plant covers an area of nineteen acres, with 1400 feet of waterfront. It has ample facilities, including dry docking, berthing space, shipways, railroad trackage, cranes, modern shops and machine tools, for the repair, overhaul and conversion of ships and other floating equipment.

R. J. Vanderwende, who for many years has been connected with Todd's activities at New Orleans, Galveston and Houston, has been placed in charge at Charleston. No changes in existing personnel are contemplated.

The acquisition of the Charleston shipyard by the Todd organization will make available to ship operators another convenient plant, supplementing its activities at Hoboken, Brooklyn, New Orleans, Galveston, Los Angeles and Seattle.



## Standard Oil Drilling on Maryland Shore

Standard Oil Company of New Jersey, continuing its search for oil along the Atlantic Coast, last month began drilling its first exploratory well in Maryland on a site three miles north of Ocean City.

The project, to be known as Maryland Esso No. 1, is being directed by K. D. White, in charge of the company's development operations along the Atlantic Coast. The well will be drilled to at least 5,000 feet and quite possibly will be deeper than that, depending on the geological sections penetrated. Eight hundred thousand pounds of machinery and equipment were brought to the site from Oklahoma.

Standard of New Jersey holds leases for approximately 80,000 acres of state-owned properties in the area of Sinepuxent, Chincoteague and Assawoman bays. Selection of the site near Ocean City, on the west side of the Ocean Highway, follows months of preliminary studies made by Mr. White and technicians.

This will be the company's second exploratory well operation on the Atlantic. The first, at Cape Hatteras, was plugged as a dry hole, but not before some valuable geological information had been obtained. The well was driven to a depth of 10,054 feet.

Interpretations of this work led to the choice of the Hatteras site for the first test because it seemed to offer the greatest possibilities of a thick section of Upper Cretaceous beds. It was considered probable that the beds were deposited under marine conditions and rose shoreward in a series of overlapping wedge-shaped beds which would form suitable traps to retain any oil which might have been present. It is hoped that similar conditions will be found in Maryland's Eastern Shore.

Actual drilling on the Ocean City site will be handled under contract by the Noble Drilling Company of Tulsa, Oklahoma, which worked the Hatteras site and has experience in the oil fields of Oklahoma, Kansas and Texas. Technical direction of the test will be by another Jersey Standard affiliate, The Carter Oil Company, Tulsa.

## New and Expanding Plants

(Continued from page 57)

**HARRISBURG** — Corporation — Lambert Construction Co., incorporated with E. F. Lammert, Dayton, and associates; capital stock \$250,000.

**RICHMOND** — Addition — E. I. du Pont de Nemours & Co., Inc., P. H. Gabriel, Plant Manager, Spruance Plant, has ground broken, and foundation footings poured for five-story addition to its present plant in Chesterfield County to be used in the manufacture of cellophane, estimated to cost \$240,570; will house machinery and equipment valued at \$2,425,230.

**RICHMOND** — Corporation — Malvern Manor Corp., incorporated with Franklin A. Trice, and associates; capital stock, \$200,000.

### WEST VIRGINIA

**CHARLESTON** — Warehouse — John J. Alessandrini plans construction of warehouse,

527 Carolina St., two-story, cost \$10,000.

**CHARLESTON** — Warehouse — Central Ohio Paper Co., 1537 Hansford, erecting two-story warehouse of tile and steel construction, 1541 Hansford St.; one-story, 40,000 sq. ft. of floor space; cost \$35,000.

**CLARKSBURG** — Facilities — Hope Natural Gas Co., filed application with Federal Power Commission for authority to construct additional gas transmission facilities in West Virginia, at approximate cost of \$4,000,000.

**HANCOCK** — Plant — Pennsylvania Glass and Sand Corp., F. D. Sachs, District Superintendent, plans doubling capacity of present plant, estimated to cost \$500,000.

**HUNTINGTON** — Station — Chesapeake & Ohio Railway Co., L. B. Allen, Vice Pres., plans improvements to passenger station.

**WHEELING** — But Terminal — Union Terminal Co., Earl W. Smith, President, has acquired site between Market and Chaudin Streets, for new bus terminal.

## Ten Months Southern Contracts Valued at \$1,512,118,000

(Continued from page 56)

and airports, \$47,670,000 for sewer and water work, and \$23,920,000 for federal electric work. Totals for these components at this time last year were \$100,923,000, \$35,945,000 and \$19,404,000, respectively.

Public building is now the rear guard of southern construction, the \$232,660,000 valuation placed on the current ten-month total is more than twelve per cent higher than the \$206,780,000 for the similar period of last year. Schools contributed \$87,167,000 to the figure; public housing, \$9,007,000. The balance was for government buildings, including hospitals.

Southern construction will probably advance several hundred million dollars more by the year's end, although shortages seriously harass the progress of this vitally important activity and are understood to be a primary factor in the bog now engulfing the veterans' housing program. Increases in prices on some items may have an encouraging effect.

The \$15,000 job allowance for work on industrial, utility and transportation buildings has been amended by the Civilian Production Administration to restrict the allowance to buildings having a floor area of 10,000 square feet or more because, as CPA officials put it, the \$15,000 allowance "constitute a complete exemption rather than a small job allowance for routine alteration jobs."

The fourth quarter export quota for lumber was placed at 170,000,000

board feet, despite the critical shortage of this material for domestic construction, particularly the veterans' housing program. Civilian Production Administration officials said the figure was 29,200,000 board feet less than was originally set for the third quarter. They said that "largely because of our exports of lumber and similar products, we import about twice as much lumber as we export."

"Lumber is one of the scarcest of the materials necessary for the Veterans' Emergency Housing Program," one of the CPA announcements read, and "extra ordinary steps have been taken by CPA and the National Housing Agency to increase domestic production and by CPA, the Department of State, the Department of Commerce and NHA to increase imports and limit exports."

The announcement further revealed "recent negotiations between the Reconstruction Finance Corporation and the Amtorg Trading Corporation had indicated that the USSR has surpluses of lumber for sale to outside regions" and that "UNRRA has agreed to take advantage of this, thus making a further saving of the United States' domestic production."

Export quotas for the fourth quarter of 1946 on principal other building materials were also announced. The quotas ranged from zero to six per cent and the list included 80 groups of commodities ranging from plumbing equipment and supplies to building board, cement, cooking and heating devices, cast iron soil pipe,

builders' hardware, saws, metal culverts and gutters, electric wiring devices and prefabricated ready-cut houses.

All of the government's war surplus of building materials and equipment is to be made available for veterans' housing within 60 days, according to the War Assets Administration. More than one million feet of lumber—enough they say to build 100 homes—was sold at the first lumber salvage sale held by WAA at Camp Howze, Texas.

Difficulties, notwithstanding, construction proceeds whenever possible, sometimes with official federal sanction, others without the permission of the Civilian Production Administration. Reasons for giving such authority in some cases are as obscure as some of the regulations described in the announcements. An example of these announcements is one issued at the middle of October. This notice reads:

"The prohibition against a manufacturer of prefabricated houses, sections and panels placing an HHI-rated order with a producer was revoked today by the Civilian Production Administration. Action was taken by amending Direction 8 to Priorities Regulation 33, governing prefabricated housing under the Veterans' Emergency Housing Program. A prefabricator now may or may not place rated orders with producers, depending on the provisions of Priorities Regulation 1 and other applicable regulations."

In the South, as in other sections, many projects are planned; others are being placed under contract by Americans who have faith in their country and its future and are undaunted by the maze of regulations, directives and restrictions through which a prospective builder must proceed to accomplish what in ordinary times would be a routine construction job.

Southern projects in the planning and other stages, as reported in the *Daily Construction Bulletin* of the MANUFACTURERS RECORD last month, include the following:

Synthetic yarn plant, \$20,000,000, American Enka Corp., Morristown, Tenn.

Pipeline, \$15,000,000, Texas Pipe Line Co., Houston, Texas;

Pipelines \$15,000,000, Texas Pipe Line Co., Houston, Texas;

Gas system expansion, \$8,000,000, Southern Natural Gas Co., Birmingham, Ala.;

Paper mill expansion, \$6,500,000, Champion Paper & Fibre Co., Pasadena, Texas;

Telephone center, \$4,000,000, Chesapeake & Potomac Telephone Co., Baltimore, Md.;

Expansion program, \$3,500,000, Shell Chemical Corp., Houston, Texas;

Assembly plant, \$3,000,000, Ford Motor Co., St. Louis, Mo.;

Port facilities, \$2,500,000, City of Pensacola, Fla.;

Felt factory, \$2,000,000, Southwest Building Products Co., Dallas, Texas;

Warehouse, \$1,000,000, J. C. Penney Co., Statesville, N. C.;

Textile mill, \$764,900, M. T. Stevens Textile Co., Dublin, Ga.;

Newspaper plant expansion, \$750,000, Chattanooga News-Free Press, Chattanooga, Tenn.;

Expansion, \$650,000, Goodyear Tire & Rubber Co., Gadsden, Ala.;

Paper box plant, \$650,000, Burd & Fletcher Co., Kansas City, Mo.;

Telephone exchange, \$600,000, Southern Bell Telephone & Telegraph Co., Miami, Fla.;

Bottling plant, \$500,000, Golden Age and Pepsi-Cola Bottling Co., Houston, Texas;

Pipe line terminal, \$500,000, Sinclair Oil and Refining Co., Austin, Texas;

Chemical plant expansion, \$500,000, Heyden Chemical Corp., Mem-

(Continued on page 60)

## Private Building

(Assembly, Commercial, Residential, Office)

	October, 1946	Contracts to be Awarded	Contracts Awarded First Ten Months 1946
Alabama ...	\$ 815,000	\$ 2,735,000	\$ 16,203,000
Arkansas ...	30,000	222,000	551,000
Dist. of Col. ....	1,100,000	4,400,000	370,000
Florida ...	10,293,000	6,188,000	84,481,000
Georgia ...	794,000	4,752,000	29,244,000
Kentucky ...	240,000	240,000	850,000
Louisiana ...	1,343,000	1,164,000	16,462,000
Maryland ...	10,260,000	1,330,000	47,361,000
Mississippi ...	150,000	700,000	10,338,000
Missouri ...	4,673,000	1,515,000	7,387,000
N. Carolina ...	879,000	3,740,000	8,155,000
Oklahoma ...	290,000	350,000	438,000
S. Carolina ...	54,000	2,111,000	2,821,000
Tennessee ...	845,000	584,000	7,720,000
Texas ...	3,832,000	8,117,000	127,575,000
Virginia ...	73,000	5,200,000	2,372,000
W. Virginia ...	.....	150,000	360,000

TOTAL \$34,241,000 \$40,198,000 \$362,688,000

## Public Building

(City, County, Federal; Housing; Schools)

	October, 1946	Contracts to be Awarded	Contracts Awarded First Ten Months 1946
Alabama ...	\$ 1,635,000	\$ 7,671,000	\$ 15,820,000
Arkansas ...	.....	1,295,000	1,738,000
Dist. of Col. ....	.....	4,540,000	4,251,000
Florida ...	440,000	9,327,000	16,828,000
Georgia ...	1,897,000	4,795,000	12,624,000
Kentucky ...	65,000	12,700,000	5,978,000
Louisiana ...	4,214,000	3,803,000	14,272,000
Maryland ...	80,000	29,592,000	22,744,000
Mississippi ...	968,000	2,429,000	4,510,000
Missouri ...	230,000	3,377,000	2,117,000
N. Carolina ...	512,000	14,492,000	15,015,000
Oklahoma ...	165,000	2,549,000	4,488,000
S. Carolina ...	376,000	9,670,000	23,746,000
Tennessee ...	2,194,000	11,595,000	14,170,000
Texas ...	5,583,000	18,235,000	56,306,000
Virginia ...	1,314,000	2,016,000	17,386,000
W. Virginia ...	.....	.....	667,000

TOTAL \$16,693,000 \$138,056,000 \$232,660,000

## Public Engineering

(Dams, Drainage, Waterworks, Sewers, etc.)

	October, 1946	Contracts to be Awarded	Contracts Awarded First Ten Months 1946
Alabama ...	\$ 735,000	\$ 2,056,000	\$ 4,131,000
Arkansas ...	.....	2,336,000	31,608,000
Dist. of Col. ....	54,000	150,000	2,890,000
Florida ...	555,000	7,091,000	17,616,000
Georgia ...	256,000	4,683,000	17,455,000
Kentucky ...	.....	923,444	20,504,000
Louisiana ...	891,000	1,980,000	17,171,000
Maryland ...	427,000	8,050,000	17,157,000
Mississippi ...	20,000	1,570,000	4,839,000
Missouri ...	612,000	2,254,000	4,148,000
N. Carolina ...	149,000	4,536,000	7,823,000
Oklahoma ...	110,000	1,216,000	30,809,000
S. Carolina ...	274,000	30,714,000	5,171,000
Tennessee ...	388,000	2,265,000	3,792,000
Texas ...	9,533,000	29,466,000	51,381,000
Virginia ...	369,000	3,823,000	6,245,000
W. Virginia ...	.....	1,570,000	730,000

TOTAL \$14,373,000 \$104,693,000 \$243,450,000

## Industrial

(Including Private Utilities)

	October, 1946	Contracts to be Awarded	Contracts Awarded First Ten Months 1946
Alabama ...	\$ 4,294,000	\$ 11,533,000	\$ 13,542,000
Arkansas ...	100,000	350,000	4,754,000
Dist. of Col. ....	.....	.....	2,037,000
Florida ...	2,909,000	1,935,000	35,571,000
Georgia ...	1,573,000	10,263,000	41,930,000
Kentucky ...	.....	404,000	249,000
Louisiana ...	215,000	4,562,000	14,137,000
Maryland ...	4,611,000	4,631,000	32,600,000
Mississippi ...	704,000	16,247,000	30,336,000
Missouri ...	4,966,000	5,070,000	15,139,000
N. Carolina ...	1,148,000	1,200,000	12,538,000
Oklahoma ...	.....	1,000,000	50,000
S. Carolina ...	400,000	443,000	14,460,000
Tennessee ...	20,000,000	22,197,000	54,410,000
Texas ...	13,328,000	48,342,000	80,597,000
Virginia ...	3,235,000	80,000	13,069,000
W. Virginia ...	.....	613,000	1,375,000

TOTAL \$57,483,000 \$122,900,000 \$366,734,000

## Roads, Streets, Bridges

	October, 1946	Contracts to be Awarded	Contracts Awarded First Ten Months 1946
Alabama ...	\$ 110,000	\$ 6,569,000	\$ 11,126,000
Arkansas ...	208,000	540,000	5,352,000
Dist. of Col. ....	548,000	220,000	3,831,000
Florida ...	5,850,000	2,785,000	17,659,000
Georgia ...	5,263,000	250,000	23,613,000
Kentucky ...	466,000	750,000	14,614,000
Louisiana ...	2,383,000	2,633,000	14,470,000
Maryland ...	1,296,000	10,810,000	17,268,000
Mississippi ...	830,000	1,386,000	10,300,000
Missouri ...	26,000	60,000	16,376,000
N. Carolina ...	1,125,000	650,000	25,127,000
Oklahoma ...	4,994,000	3,370,000	12,641,000
S. Carolina ...	2,212,000	1,761,000	24,431,000
Tennessee ...	774,000	1,057,000	14,670,000
Texas ...	10,070,000	14,070,000	72,818,000
Virginia ...	1,829,000	18,665,000	13,922,000
W. Virginia ...	.....	780,000	8,378,000

TOTAL \$38,094,000 \$66,219,000 \$306,586,000

## Southern Construction

(Continued from page 59)

phis, Tenn.;

Warehouse, \$400,000, Elmer Woolbridge, Fort Worth, Texas;

Sulphuric acid plant, \$300,000, Wilson & Toomer Fertilizer Co., Jacksonville, Fla.;

Railroad yard enlargement, \$300,000, Chesapeake & Ohio Railway, Clifton Forge, Va.;

Telephone expansion, \$300,000, Southern Bell Telephone and Telegraph Co., Atlanta, Ga.;

Plant project, \$278,000, Seiberling Rubber Co., Garland, Texas;

Plant and salesroom, \$265,000, Morgan-Whitley, Houston, Texas;

Paper plant addition, \$239,000, International Paper Co., Camden, Ark.;

Steel plant improvements, \$215,000, Bethlehem Steel Co., Sparrows Point, Md.;

Warehouse, \$200,000, Citrus Products Co., Plant City, Fla.;

Warehouse, \$200,000, Kraft Foods Co., Birmingham, Ala.;

Warehouse and office, \$200,000, Kraft Foods Co., Tampa, Fla.;

Telephone exchange, \$200,000, Southern Bell Telephone & Telegraph Co., LaGrange, Ga.;

Publishing plant, \$190,000, Florida Publishing Co., Jacksonville, Fla.;

Telephone exchange, \$150,000, Southern Bell Telephone & Telegraph Co., Atlanta, Ga.;

Natural gas system, \$150,000, T. O. Mabry, Jr., Engr., Moss Point, Miss.;

Laboratory building improvement, \$150,000, Shell Oil Co., Houston, Texas.

Garment plant, \$150,000, Walhalla Development Co., Walhalla, S. C.;

Milk plant, \$130,000, Superior Dairies, Austin, Texas;

Frozen food locker plant, \$128,000, Blue Ridge Frozen Foods, Inc., Lynchburg, Va.;

Warehouse, \$120,000, Broward Grain & Supply Co., Fort Lauderdale, Fla.;

Fertilizer warehouse, \$120,000, Broward Grain & Supply Co., Fort Lauderdale, Fla.;

Bus station, \$118,000, Union Bus State and Queen City Coach Co., Florence, S. C.;

Warehouse and office, \$100,000, Houston Lighting and Power Co.,

Goose Creek, Texas;

Bakery, \$100,000, Marvin Lunsford, Dallas, Texas;

Thread plant, \$100,000, North Georgia Processing Co., Toccoa, Ga.;

Warehouse and cold storage facilities, Winn & Lovett Grocery Co., Jacksonville, Fla.;

Newspaper plant, Dallas Morning News, Dallas, Texas.

## Humble Pipe Line

(Continued from page 48)

thousand barrels of crude daily, are not equipped with catalytic cracking facilities.

Therefore the pipe line. Humble Pipe Line Company began construction of the line as soon after the war as material for the project became available. Its completion makes economically possible an expansion of Humble's marketing facilities over a large section of North Texas in which the Company has not been operating.

In the interim period between war's end and the completion of the products line, Humble has been supplying the Fort Worth-Dallas area by rail in order to provide the new quality gasoline until the pipe line was ready.

Built of all new steel pipe, the products line has a capacity of 15,000 barrels daily: total cost was about \$4,000,000. It was coated and wrapped by the latest type double-wrap machine, which automatically spiraled on a layer of thin Fiberglas under the conventional wrap of asbestos felt. To guard against corrosion, electrical connections for the cathodic protection process were installed at half-mile intervals.

Since it carries finished products, great care was taken to keep the line clean during construction. Each piece was capped until shortly before welding began, thus preventing entry of mud, sand, water, small animals and other objects which might obstruct passage or contaminate products.

Immediately after each segment of line was welded, it was put under air pressure of 100 pounds per square inch and welds were tested for leaks. Later, as the line was completed, sections between block valves were filled with gasoline and subjected to a hydrostatic pressure test of 1,500 pounds per square inch.

Pump stations are at Baytown

and Hearne, with delivery terminals at Houston, Hearne, Waco, and the Fort Worth-Dallas plant. Pumps are multiphase, electrically driven centrifugal type.

North Texas automobile drivers probably will be the first to feel the good effects of the line, but in the near future its deliveries will also provide aviation gasolines for fliers and motor fuels for many of this area's industries and farms.

## Frisco Expansion

(Continued from page 47)

feet).

Pedestrian underpass: from superintendent's building to roundhouse (268 feet long).

Water facilities: 100,000 gallon steel tank and two cranes at east end of yard.

Relocation of Division Street Road and overpass: Pave and improve new route for Division Street Road via Fulbright, Calhoun and Hutchinson Avenues with Hutchinson Avenue overpass

### Roundhouse and Engine Handling Facilities

Tracks: 8.7 miles of roundhouse and engine handling tracks including 30 switches.

Buildings: (All brick construction with concrete foundations and floors) roundhouse—50 stalls, including two tank and four Diesel stalls, includes 110 ft. turntable, boiler washer, monorails, drop pits, etc.; roundhouse office and wash and locker rooms (40 x 100 ft.); engine supply room (20 x 60 ft.); pipe, carpenter, air and tool shop (25 x 140 ft.); oil reclaiming plant, Diesel (35 x 50 ft.); restaurant, two story, frame (60 x 80 ft.).

Engine handling facilities: 400 ton coal chute and sanding facilities; three cinder pits.

### Shop Buildings and Rearrangement and

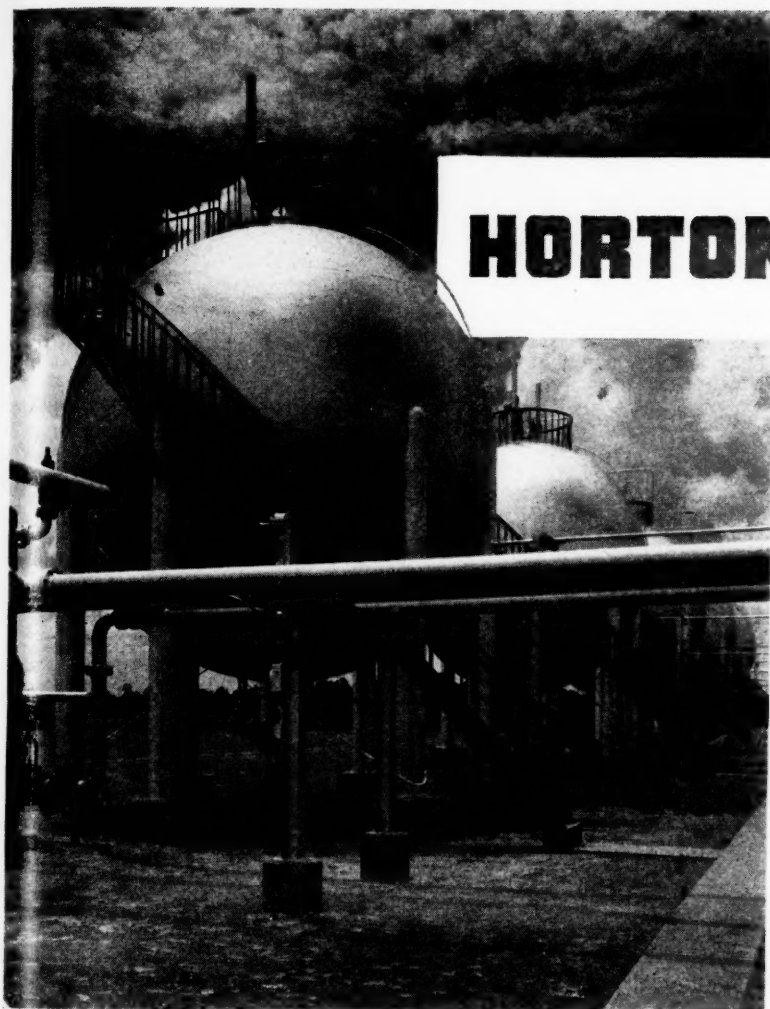
### Additions to Store Department Facilities

Tracks: shop and store department tracks totaling 3.2 miles and including 20 switches.

Buildings: (all brick with concrete floors). Machine shops (140 x 220 feet); Special equipment shop (125 x 240 ft.); Boiler Shop (120 x

(Continued on page 62)





# HORTONSPHERES

... provide  
pressure storage  
at a Southern  
condensate-  
natural-gasoline  
recovery plant.

The five 26-ft. diam. Hortonspheres shown above are used to store volatile products at United Gas Pipe Line Company's new recovery plant in the Carthage, Texas, gas fields. The first two (from left to right) are designed for a working pressure of 50 lbs. per sq. in. and the three in the background operate at 150 lbs. per sq. in. pressure.

The Carthage plant is designed to process 150,000,000 cu. ft. of raw gas daily from which 170,000 gals. of liquid products are recovered. In addition to the Hortonspheres shown above, there are several Horton flat-bottom storage tanks and a Horton elevated

Watersphere at this plant ... all designed, fabricated and erected to do a specific job better.

When planning modernization or plant extension programs that call for equipment of this kind, write our nearest office for quotations.

*HORTONSPHERE is the trade name of Chicago Bridge & Iron Company spherical pressure tanks used to store volatile liquids and gases. It is built in standard capacities for pressures as high as 50 lbs. per sq. in. up to 65 ft. diam.; 75 lbs. up to 51 ft. in diam.; 100 lbs. up to 40 ft. 6 in. in diam.; and 150 lbs. up to 28 ft. in diam. For complete details write for Bulletin F.*

## CHICAGO BRIDGE & IRON COMPANY

Atlanta 3 .....2145 Healey Building  
Birmingham 1 .....1530 North Fiftieth Street  
Houston 1 .....5614 Clinton Drive  
Tulsa 3 .....1611 Hunt Building  
New York 6 .....3313-165 Broadway Building  
Cleveland 15 .....2216 Guildhall Building

Chicago 4 .....2106 McCormick Building  
San Francisco 11 .....1240-22 Battery St. Building  
Philadelphia 3 .....1619-1700 Walnut St. Building  
Los Angeles 14 .....1417 Wm. Fox Building  
Washington 4 .....703 Atlantic Building  
Detroit 26 .....1510 Lafayette Building

Plants in BIRMINGHAM, CHICAGO and GREENVILLE, PENNSYLVANIA

## Frisco Expansion

(Continued from page 60)

140 ft.); Blacksmith shop and foundry—cinder floors (60 x 135 ft.); Tin shop (50 x 135 ft.); Pattern shop (40 x 60 ft.); Shop wash and lock room (40 x 60 ft.)—two stories; three engine inspection pits; two engine wash racks; fuel oil storage—10,000 bbl. storage and two 20,000 gal. elevated tanks with two cranes and pumps; Diesel fuel oil storage, 20,000 gal. tank, pumps, etc.; water facilities; three cranes, pipe lines connected to 100,000 gal. tank in yard.

Additional power facilities: (In present power house) two 400 hp boilers; two 3,000 cubic foot compressors.

Sewers and drainage: storm and sanitary sewers, oil separator and miscellaneous drainage.

Buildings: (steel frame, transite siding with concrete) Wheel shop building (80 x 150 ft.); Journal lathe and packing supply room (20 x 90 ft.); Office for light repair rip tracks (20 x 50 ft.); Toilets, light repair yard (20 x 20 ft.); Material platforms and racks (20 x 730 ft.).

### Car Department Facilities

Tracks: including standard yard tracks of 0.7 miles, four switches and special wheel press and double rail wheel tracks.

Shortly after the railroad was built into Springfield in the early seventies, five yard tracks with a capacity of 160 cars were built in the north side at the site of the present yard. In 1899, five tracks able to handle about 150 cars were added, and a few years later some short extensions were made increasing the capacity to about 400 cars.

The original yard was on the north side of the main track. When the line was consolidated with the Kansas City, Fort Scott and Memphis in 1902, eight yard tracks with a capacity of 240 cars were built on the south side of the main. Slight extensions were made to these tracks so that the present yard now has a total of 18 tracks with a car capacity of 790 cars. The longest of the tracks has a 60-car capacity and the shortest a 30-car capacity. In the new yards 20 of the tracks will accommodate 100 cars each.

The KCFS&M, before consolidation with the Frisco, had a 291 car yard on the south side, west of the passenger station, that was used for classification purposes. After the merger, however, all classification was handled in the north yard and the old KCFS&M yard was used for handling cars going to south side industries and storage of surplus equipment.

The new yard will have 36 tracks. Twenty tracks will be 4,526 feet long and will be divided, 10 for westbound receiving purposes and 10 for eastbound receiving purposes. There also will be eastbound and westbound classification yards of eight tracks each with each track totaling 3,000 feet.

Frisco officials have stated that no other single project undertaken on the railroad has entailed so great an expenditure as the new Springfield yards and mechanical facilities. The recently completed Dixon Hill project which reduced the grade line 50 percent and eliminated curves amounting to three complete circles, cost the railroad \$1,500,000. The Yale Yards in Memphis cost \$1,500,000 also. The Lindenwood Yards in St. Louis cost \$850,000.

## Joyce Interests to Build Louisiana Lumber Plant

Tremont Lumber Co., controlled by the Joyce interests of Chicago, will establish sawmill, planing mill and hardwood flooring plant at Menefee, three miles northeast of Winfield, the seat of Winn Parish, Louisiana, according to an announcement by Claude H. Lindsay, vice president and general manager.

Construction of the new plant is to get under way in November with 12 months announced as the time required for completion. When placed in operation, the plant will have an estimated annual payroll of \$250,000. A veneer and box-making unit will be added later at the site, which is on the 97.5-mile Tremont and Gulf Railroad.

The Tremont Lumber Co. formerly operated a large mill, planing plant and other units at Rochelle, La. These operations were closed several months ago. The new plant at Menefee is being constructed as a permanent operation and as Tremont officials put it "with an eye toward

the future."

The Joyce interests entered business in the Louisiana area about 1900 with sawmills at Tremont and Eros. In 1902, they started construction of the railroad to serve their sawmills. The line at that time ran from Tremont to Womack, a distance of 24 miles. More trackage will be constructed to handle the Menefee output.

## C. & P. Telephone Program

(Continued from page 45)

such scope as to include, in addition to betterments and extension of telephone service, the introduction of new services to increase the value of the telephone. Outstanding among these late communication developments are such features of telephone engineering as mobile radio-telephone, direct operator toll dialing and the provision of adequate circuits for the transmission of television broadcasts.

Urban mobile radiotelephone service making possible telephone communication to moving vehicles has long been a recognized need by telephone engineers and scientists. With experience gathered from developing coastal and harbor ship-to-shore service plus the background provided by work done for the Army and Navy during the war, these experts have succeeded in increasing beyond measure the value and use of the telephone.

First to introduce mobile radio-telephone service in the C and P. area was the Washington company. Its system went into operation on October 4, on an experimental basis. Similar systems are now under construction in Baltimore and in Norfolk and Richmond, Va., by virtue of the granting of construction permits by the Federal Communications Commission. The Maryland and Virginia companies are installing main transmitters and receiver stations in and around the three cities and service is expected to be introduced early next year.

Another telephone engineering advancement designed to increase, even more, the speed of long distance service, is direct operator toll dialing, a telephone development enabling operators to dial long distance calls directly and unassisted straight through to the distant

(Continued on page 64)

**WE'RE HANDLING**

**142,000,000**

**LOCAL CALLS A DAY**



That's 25,000,000 more than a year ago—and an all-time high.

It didn't seem possible that available equipment, with such additions as we could make, could be stretched to handle an increase like that. But it's been done despite shortages of materials and other handicaps. Best of all, service keeps on being good on most calls.

There are delays once in a while but we're doing our best to make them fewer and fewer. Service will be better than ever as soon as new equipment can be made and installed.

**BELL TELEPHONE SYSTEM**





## C. & P. Telephone Program

(Continued from page 62)

called telephone. This new feature is already in effect on some routes throughout the C. and P. territory and will be expanded.

In supplying circuits for television broadcasts, the C. and P. pointed out that a considerable amount of technical engineering work will be required on the part of the local companies.

It would be difficult today to touch on any section of the four-state C. and P. area and not find some telephone expansion project under way or contemplated.

In Maryland, signs in many localities signal that "more and better telephone service is on the way." New central office buildings have been completed at Clear Springs, Golden Hill, Chase and Churchville and are under construction at Darlington and Myersville. Building additions have already been completed in Arbutus, Pikesville, Westminster, Annapolis, Frederick and are in progress at Hagerstown and Liberty, in Baltimore. On schedule, among other places, are Curtis, Dundalk, Elkton and Hamilton, in Baltimore. The major new job of the Maryland company is under way in the eastern section of Baltimore, where a \$4,000,000 six-story dial center is being constructed.

All over the state, fast-working cable crews are busy providing extensions and additions to local cable systems. In the past year, 98,273 circuit miles of new cable have been added.

In the Nation's capital, the top expansion project is a \$3,000,000 improvement program in southeast Washington involving the erection of a new dial central office. Scheduled for completion in 1947, the installation will provide service for approximately 15,000 applicants as well as take care of future growth.

Cable extensions, aside from the large placements in connection with the new central offices and building additions, also constitute a generous slice of the Washington program. Since August of last year, 13 miles of conduit have been laid in the District of Columbia alone, at a cost of \$186,800, and enough cable has been placed to carry 45,032 miles of wire at a cost of \$688,700.

Telephone expansion projects are sprouting like mushrooms all over Virginia. The biggest involves the erection of a new building at Portsmouth to house the latest type dial equipment. The entire job will cost more than two million dollars. In Richmond, Norfolk, Danville, Roanoke, Hampton and Virginia Beach equipment additions are being made, buildings are going up and cable networks are expanding.

In the mountain state of West Virginia, the program is equally intensive and is being pressed forward with all possible speed. The sound of hammers and the sing of saws took over shortly after V-J Day when a new telephone building shot up at Dunbar. Holding the honor of being the first such structure to be erected since peace, the building now houses dial equipment which made possible the filling of a number of held orders for service.

At Parkersburg, a \$1,500,000 job is under way. Williamson is on tap

(Continued on page 68)

## L. & N. Streamliners

(Continued from page 43)

These trains are the last word in modern comfort and speed, and will offer really luxurious transportation at coach rates. Each will consist of four coaches, one diner, one tavern-lounge and one coach-lounge. The coach-lounge is equipped with seats for 58 people. The lounge section of this car accommodates 10 persons, and is equipped with radio.

All of the cars are eighty-five feet in length, with a roof height above the rails of 13' 6" and a truck wheel base of 8' 6". The table of individual car weights indicates a saving of roughly 10,000 pounds as compared with equivalent cars of conventional heavy construction. The total seating capacity of each train of seven cars accommodates 298 passengers.

The exterior color treatment is particularly attractive, being a combination of standard L. & N. royal blue with anodized aluminum fluting.

Apart from the attractive interiors of cream, aluminum and rose decor, the cars have many practical innovations which contribute to extremely comfortable traveling. They include an individual lighting system, with fluorescent tubes to

eliminate glare; reclining chairs; wider windows; self-emptying ashtrays in each chair, and individual heating units, along with the general air-conditioning system. Folding arm rests are between the double seats.

The tavern-lounge car will accommodate 24 passengers in the tavern section and 28 passengers in the lounge section. The seating arrangement is somewhat unique, in that it provides two tables for four persons each, and four semi-circular booths each seating four persons. The seating arrangement in the lounge consists of movable aluminum-frame chairs and settees.

The cars are decorated at each end with photographic murals depicting scenes along Louisville and Nashville routes.

## Orderly Yarn Market

(Continued from page 42)

Thus it is that carded yarn spinners now find themselves voluntarily assuming tactical activities of shock troops. Their spirits are high, because they think they can weather the deflation storm—but only if they stick to sound business practices. If the spinners take refuge behind a complex combination of yarn specifications and alibis, a Pandora's box of troubles will be opened before all textiles, in Mr. Fitzsimons' opinion.

Meantime, these spinners, with justification, wonder about their future—they cannot forget that extensive textile integration during recent years has wrought revolutionary changes in the production and distribution of textiles, particularly sales yarns.

## Kansas City Industry

(Continued from page 41)

over \$12,000,000.

Many of Kansas City's large and nationally known industries have recently completed or are in the process of adding new facilities to meet the demands of Kansas City's growing market area. Expenditures for these expansions will total well over \$50,000,000.

New industries reported by the Chamber of Commerce of Kansas City, Missouri since V-J Day will, when in full production, provide employment for approximately 6,000

(Continued on page 66)

# NATURAL GAS

A fuel whose value has been proven by years of use in a most diversified line of industrial applications.

Natural gas has created the possibility of effortless comfort by the facility, and economy with which it fits into the home.

## SOUTHERN NATURAL GAS COMPANY

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<b>ILLINOIS</b>	
HOTEL FAUST	Rockford
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HOTEL CLAYPOOL	Indianapolis
<b>LOUISIANA</b>	
JUNG HOTEL	New Orleans
HOTEL DESOTO	New Orleans
<b>MISSISSIPPI</b>	
HOTEL LAMAR	Meridian
<b>NEBRASKA</b>	
HOTEL PAXTON	Omaha
<b>NEW MEXICO</b>	
HOTEL CLOVIS	Clavis
<b>OKLAHOMA</b>	
HOTEL ALDRIDGE	Wewoka
<b>SOUTH CAROLINA</b>	
HOTEL WADE HAMPTON	Columbia
<b>TEXAS</b>	
HOTEL ALICE	Alice
HOTEL STEPHEN F. AUSTIN	Austin
HOTEL EDSON	Baumont
HOTEL BROWNWOOD	Brownwood
HOTEL CORTEZ	El Paso
HOTEL TEXAS	Fort Worth
HOTEL BUCCANEER	Galveston
HOTEL GALVEZ	Galveston
HOTEL JEAN LAFITTE	Galveston
CORONADO COURTS	Galveston
JACK TAR COURT HOTEL	Galveston
MIRAMAR COURT	Galveston
HOTEL CAVALIER	Galveston
HOTEL PLAZA	Laredo
HOTEL LUBBOCK	Lubbock
HOTEL FALLS	Marlin
HOTEL CACTUS	San Angelo
HOTEL MENGER	San Antonio
ANGELES COURTS	San Antonio
<b>VIRGINIA</b>	
HOTEL MOUNTAIN LAKE	Mountain Lake



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## Kansas City Industry

(Continued from page 64)

persons, with plant investments running into millions. As an example of some of these outstanding new concerns and expansions, the General Motors Corporation has just recently started production of Buick, Oldsmobile and Pontiac automobiles with a plant investment of well over a million dollars and a possible peak employment of 5,000 persons.

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Another example, Falls Spring and Wire Corporation's large spring and wire plant located in North Kansas City, an industrial suburb of Kansas City, Missouri, to produce cushion springs and other spring wire products for industrial consumption in the Kansas City area; a third example is a huge expansion costing \$20,000,000 by the Standard Oil Company of Indiana at their Sugar Creek refinery, another industrial suburb of Kansas City, Missouri.

Looking forward to the time when the period of scarcity of materials has passed, a big majority of Kansas City's industrial plants plan employment to the extent that they will surpass employment figures reached by Kansas City at the wartime peak.

Population for the Kansas City Metropolitan area has steadily increased before and since the last census year of 1940. Present day unofficial estimates show Greater Kansas City's population to be approximately 750,000 with every indication that this figure will show a substantial increase as housing and industrial development progress.

Kansas City's biggest obstacle to expansion since V-J Day has been the shortage of housing, both residential and industrial. Although housing has progressed as rapidly as possible under present day material shortages, it is expected to take many months and even years for residential and industrial housing to catch up with current demands.

Industrial growth in Kansas City is in line with an already well-balanced economy between agriculture, industry and transportation. Kansas City's new industries stand to gain by improving this balance.

## Practical Plastics

(Continued from page 39)

chinery to produce "practical plastics" which would, he hoped, be as popular as his first invention. Looking over the field, he saw that there was an opening for plastic materials people could use, as well as look at. He started with a bathroom line: Toilet paper holders, towel racks, soap dishes, and toothbrush and towel holders. During the war it was difficult to get materials, but after V-J day Mr. Vining's business immediately moved ahead. A kitchen line of knife-holders, dish-towel hold-

ers and other items is soon to be added. The Rohm and Haas Company approved the Vining concern to supply its plexiglass raw materials through the South, and a flood of "end-work" was obtained from manufacturers of large complicated products which used plastic parts in their design.

In the middle of 1945 it became apparent that the two small shops could not carry the load. A lot, 350 by 110 feet, adjacent to the Florida East Coast Railroad tracks, was purchased and a huge "Quonset Hut" 100 feet long by 40 feet wide by 20 feet high was installed by the Stran Steel Company. In this structure, which is full of sunlight, cool in summer and hurricane proof, the Vining's put in a concrete floor and a battery of machines which were designed by Keith Vining himself.

The machines are as follows:

A double-spindle automatic-feed towel bar shaper which provides a more even feed than older models, reduces chipping and scratching to a minimum. The cutter can be synchronized with the drive to handle plastics of different hardnesses more efficiently.

The second development was an injection molding press, which cost \$1500 and, in the words of a Rohm and Haas sales engineer "does as good a job as machines costing \$12,000."

A conveyor-belt feed, operating inside an electrically heated oven, is adjustable to provide uniform heating for various sizes and thicknesses of plastic, and delivers them at high speed to the bending jig (also an exclusive Vining design). The old type jigs weren't fast enough to handle the heated plastic from the new oven, but with the advent of the new jig, production costs have been lowered. On June 1, 1946, when other plastic makers were upping prices, the Keith Vining concern lowered all prices an average of 7%. This was due to the efficiency of all the new equipment.

Employees and friends (everyone connected with the organization, except Cecil Vining, Keith's father, is an ex-GI) wanted to buy into the up-and-coming concern. It was eventually decided to incorporate under the name "Practical Plastics, Inc." which is also the trade name of the product. This was done with a capi-



talization of \$30,000. Many new items were added to the line: Robe hooks, artistic decorative items, even plastic mail boxes which are rain-tight and fitted with a special plastic clip to hold magazines and newspapers.

Through a special process of injection moulding the outfit can produce items with knobs and ornamentation out of flat sheets. This has opened a complete new field for their endeavor.

Practical Plastics Inc. has five full-time salesmen on the road, sells direct to retail outlets in the main, but has handled big blanket orders for people like Sears-Roebuck and Gimbel's in New York. They have sold in every state south of the Mason-Dixon line and in Illinois, Indiana, Michigan, Pennsylvania and New York state.

The motto of the business lies in its name. The work must be practical. On rare occasions, when a non-practical item was sold, the Vinings took it back and refunded the money. They are now at work on heavy-duty tie-backs and curtain cranes, drawer-pulls, and door handles—all made of strong durable, non-rusting plastic. They ship railway express right from their side door. They are the only maker of heavy-duty household plastic ware in Florida.

Soon they expect to start advertising in magazines to attract manufacturers who make larger items to give them end-work orders. Advertisements in consumer magazines are also planned to create a demand at the bottom. So far, little advertising has been done. The products have sold themselves, as letters from dozens of states testify.

The officers of the corporation are as follows: Keith Vining, president; Phillip Vining, vice president; Evenyn Vining, treasurer; Ruth Duffield, secretary; Cecil Vining, superintendent of shop; The board of directors are: John Herbert, Jr., T. A. Duffield, and Myra C. Vining.

Two years ago, the Vining Plastic organization did not exist. Today it has a good Dunn and Bradstreet rating and one of the brightest futures of any new concern in the south. Practical Plastics proves the old adage—"Build a Better Mousetrap and the World will Beat a Path to your Door." In this case, however, it happened to be a clothespin.



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Emerson said, "Knowledge and timber shouldn't be much used till they are seasoned." Here, at Virginia Engineering Company, 500 man-years of day-by-day experience have seasoned the capabilities of our executive personnel. Time has given them proficiency, the quick effective use of their knowledge. Time has developed aptitudes. Time has sharpened perceptions—made patterns and performances as near perfect as possible . . . Let us use our experience—combined with yours—to produce a real "salt and pepper" construction job for you.



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BUILDING - HIGHWAY & HEAVY CONSTRUCTION  
MECHANICAL - ELECTRICAL - UTILITIES

*Contractors to American Industry*  
WE BUILD TO YOUR DESIGN

## C. & P. Telephone Program

(Continued from page 64)

for an \$81,000 project while at Fairview completion of a \$29,000 job will see conversion to dial operation of the only remaining magneto system operated by the C. and P. in the state.

And so it goes throughout Washington, Maryland, Virginia and West Virginia. The great expansion program of the C. and P. Companies is but a part of an overall Bell Sys-

(Continued on page 74)

## Arkansas Industry

(Continued from page 38)

still hold true, but by 1944, Arkansas' per capita income had increased 139 per cent to \$601, or 54 per cent of the national average, which had failed to double, and by January 1, 1946, Arkansas bank deposits totaled \$785 millions compared with \$408 millions at the end of 1942 and \$182 millions in 1930.

Commerce Department figures reflect the increase in manufacturing.

While the average urban wage has doubled in Arkansas since 1939, year of the last census of manufactures, manufacturing wages paid in the state have increased in dollar value from \$24,570,000 in 1939 to approximately \$110,000,000 in both 1944 and 1945. In the same period, income from agriculture barely doubled. This would indicate a real gain in manufacturing as against the general increase of income from all sources. The United States Employment Service estimate manufacturing employment in Arkansas as of March 15 at 67,000, compared with a wartime peak of 85,000 and a 1939 total of 36,000.

Arkansas has enormous potential wealth in its natural resources. Forests cover approximately two-thirds of the state's area and much of the commercial stand estimated at 40 billion board feet, is logged on a perpetual yield basis. Reserves of high quality, semi-anthracite coal are estimated at 800 million short tons, oil at 400 million barrels, natural gas at 1,300 billion cubic feet. The state possesses 97 per cent of

the nation's known reserve of commercial grade bauxite and other minerals found in commercial quantities include manganese, mercury, lead and zinc, titanium, asphalt, barite, lignite, chalk and marl, special clays, glass sand, gypsum, limestone and dolomite, marble, low grade phosphate rocks, nepheline syenite (granite), slate, novaculite, tripoli, and immense quantities of sand and gravel.

Arkansas' gross income from agriculture has risen to about 380 millions annually. It is the nation's third largest cotton producing state with a normal crop of 1.5 million bales, third largest rice producer at 15,000,000 bushels, the South's most important soybean producing state with 3,600,000 bushels. It ranks high in production of corn, Irish and sweet potatoes, sorghum, oats, hay, apples, peaches, peanuts, grapes, strawberries, spinach, tomatoes, beans and pecans.


Nevertheless, prior to World War II, little industrial use had been made of these resources. In 1940, Arkansas produced about \$210 millions in raw materials but made only \$129 millions worth of manufactured products from those materials. Its ratio of manufactured products to value of raw materials for that year was 61 per cent, compared with a national average of 295 per cent.

The new day opened for Arkansas with investment of more than \$250,000,000 in war manufacturing facilities in the state. These included the largest alumina plant in the world at Hurrican Creek near Benton and a large aluminum reduction plant at Jones Mill, near Hot Springs, a bomb fuse and detonator plant near Little Rock that employed 13,000 persons, a huge bomb arsenal at Pine Bluff, a rocket manufacturing plant at Camden for which \$100 millions were allocated when the war ended, an explosives plant near Little Rock, high octane gasoline refineries, a butadiene and an ammonia plant at El Dorado.

Along with these big plants came a host of smaller establishments processing foods, wood and minerals, both federally and privately financed. Arkansans flocked into the state's towns and cities, or moved to war plant jobs in other states, and Arkansas farms sustained a sharp loss of population


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Here is an unusual Wire Form, lately developed to keep in place a strapless brassiere, and because quality was mandatory for this intimate device Johnson XLO was specified. This is but another example of Johnson Music Wire superiority. Longer fatigue life, longer spring life.



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which has not been regained.

Among the many aspects of this changed situation were these significant facts: The force of semi-skilled and skilled labor tripled in size, Arkansas manufacturing costs were among the lowest in the nation, farm production was increased through expanded mechanization, with a labor force but half as large as prewar totals, and Arkansas enterprisers who had been content to buy and sell, learned that they could operate successfully manufacturing plants.

It was to take advantage of these findings that the Arkansas Economic Council was formed in 1943 at a meeting of business men and farmers from all over Arkansas. Objective of the Council was and is to make permanent Arkansas' heightened status as a manufacturing state, to provide urban employment for displaced agricultural workers, thereby raising the farm standard of living, and to see to it that Arkansas' 200,000 service men and women had a job waiting for them on their return to civilian life.

C. Hamilton Moses, president of the Arkansas Power & Light Company, headed the Economic Council, which set about organizing units in each of Arkansas' 75 counties to supplement the work of its 17 statewide committees and shortly thereafter assumed the task of carrying on the Committee for Economic Development program in the state. Early in 1945, the Economic Council was merged with the Arkansas State Chamber of Commerce and the state legislature consolidated a group of state agencies into the Arkansas Resources and Development Commission consisting of these divisions: Agriculture and Industry, Forestry and Parks, Publicity, Flood Control and Soil Conservation, Planning, and Geology. The same legislature appropriated funds sufficient for a considerable expansion of the Bureau of Research at the University of Arkansas, Fayetteville.

While these state agencies were getting organized, the Economic Council-State Chamber completed industrial surveys indicating that 95 per cent of the state's war plant labor planned to remain in Arkansas after the war provided industrial employment was available and that

(Continued on page 70)

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1678 McCORMICK BUILDING, CHICAGO 4, ILLINOIS



## Arkansas Industry

(Continued from page 69)

the 24,000 women added to the state's industrial labor force had no intention of going back to farms and households if they could find urban jobs. Mr. Moses addressed meetings of business men in 60 counties urging a concerted campaign to secure new industries through appraisal of locally abundant resources and the Council's staff kept in close touch with chambers of commerce and its county committees, seeking completion of industrial and resources surveys in every section of the state.

Next move was to coordinate work of the Economic Council-State Chamber with that of the Resources Commission and Research Bureau through regular meetings for exchange of information, joint participation in specific projects and mutual assistance. For example, the Research Bureau undertakes surveys at the request of the Council which asks its county units to assemble local data for the Resources Commission and sends out to its members publications of the state

agencies. Jointly-sponsored statewide meetings, cooperation in a campaign to improve Arkansas marketing facilities, and coordinated field work are other facets of this effective working arrangement which has helped produce a new spirit of unity in a state long divided by the diverse interests of the Ozark hill sections and cotton-growing alluvial plain.

What are some of the results of this activity? In 1944, Arkansas gained 200 new manufacturing plants or substantial expansions. In 1945, the total was more than 400. Industrial expansion continues at a high level in 1946.

Prior to 1945, Arkansas had never had a shoe factory. Then Frolic Footwear, Inc., established one employing 300 persons at Jonesboro. Brown Shoe Company started building a plant to employ 500 at Pochontas in addition to the 225 now employed in a temporary factory. International Shoe Company is building four factories, to employ 450 each, at Conway, Russellville, Searcy and Batesville, and will establish a sole-cutting plant at Bald Knob. Trimfoot Shoe Company, Inc., will employ 500 persons in a

new factory being built at Newport and indications are that several other shoe factories and probably one or more tanneries will be located in the state this year.

Oberman & Company of Jefferson City, Mo., will establish three new garment factories, each employing about 300 workers, at Arkadelphia, Walnut Ridge and Morrilton. Shanhouse & Sons will employ 250 in a new sportswear plant at Hope. Ottenheimer Bros., have expanded their garment factories in Little Rock, plan to build another. Munsingwear, Inc., is building a 300-employee nylon hosiery mill at Rogers; Rice-Stix of St. Louis is doubling the size of its Blytheville plant.

Atkins, a small town that had never had an industry, has established through local action, one of the largest spinach canneries in the state, the Valley Canning Company, and as a result of increasing its cucumber production, obtained a \$100,000 pickle factory to be operated by the Goldsmith Company of Chicago. Kraft Cheese Company is building a \$250,000 cheese plant at Bentonville; Avoset, Inc., of California has announced it will locate a \$750,000 cream stabilization and milk by-products factory at Paris. American Can Company has started construction of a \$1,000,000 can factory at Fort Smith. Van Buren Frosted Foods Company is building a \$200,000 frozen food plant at Van Buren; Welch Grape Juice Company is spending \$500,000 expanding its Springdale plant; Little Rock Food Products Company will build a \$150,000 cannery at Little Rock; Home Ice Company of Little Rock has completed a \$100,000 quick freeze plant; White Company, Inc., and Hoosier Food Products Company, have new strawberry processing plants costing more than \$100,000 in operation at Bald Knob.

Arkansas Rice Growers Association is completing three new rice driers, each costing \$200,000, and a \$600,000 rice mill at Stuttgart, where Walton Rice Mill, Inc., is spending \$350,000 on a plant to produce Malekized (parboiled) rice. Other rice mills and driers are being built at Jonesboro, McGehee and Newport. At Helena and Osceola, new solvent process cotton oil mills are being built at a cost of \$250,000

(Continued on page 71)



*This*  
**WISCONSIN-POWERED UNIT..Cleans Out Paraffin in Oil Wells**

Originally designed for marine service, this Wisconsin "Muskie" Engine, with 2:1 ratio reverse clutch reduction assembly, proved ideally adapted to the job of powering a hoist unit used for cleaning out paraffin in oil wells.

Wherever there is a power job to be done, within a 2 to 30 hp. range, you can depend on Wisconsin Engines for heavy-duty service and complete freedom from cooling chores and troubles. Available in single cylinder and 4-cylinder types in a complete range of sizes to fit a great diversity of power applications. For detailed data consult Harley Sales Co.

**WISCONSIN MOTOR Corporation**  
 MILWAUKEE 14, WISCONSIN  
 World's Largest Builders of Heavy Duty Air-Cooled Engines

each. Northwest Arkansas Poultry Growers will build a \$250,000 poultry processing plant at Springdale.

Chase Bag Company is completing a new \$500,000 paper bag plant at Crossett. National Lead Company built a new \$250,000 Baroid plant at Magnet Cove; Camden Furniture Company of Camden is spending \$250,000 on plant expansion, McCoy-Couch Furniture Company, of Benton \$300,000. U. S. Time Corporation plans to expand its alarm clock plant in Little Rock established in 1915 and employing 600 persons.

Minnesota Mining & Manufacturing Company, has under construction a \$1,500,000 plant at Little Rock to grind nepheline syenite into roofing granules. Southern Acid & Sulphur Company has completed a \$300,000 gas desulphurization plant near Stamps, and Arkansas Power & Light Company has found it necessary to build a new \$3,500,000 power plant in North Little Rock. At Helena, Pekin Wood Products, a Chrysler subsidiary, is spending \$2,000,000 on a new station wagon body factory.

These are merely a few highlights of the Arkansas industrial picture. Fully as important for the future are the far more numerous and unsung small plants being established all over the state by Arkansas people—the Little Giant Glass Company at Jonesboro which makes blown glass minnow traps for Abercrombie & Fitch of New York, Paul Leird's new \$150,000 plywood mill at Searcy and Bralei Homes, Inc., prefabricated house factory in Little Rock, Stebbins & Roberts' \$100,000 paint factory expansion and new brush-making plant, a new basket factory at Nashville, a fertilizer factory at Helena, or a candy factory at Hot Springs.

Of greatest significance is the new spirit of determination in Arkansas to achieve a higher return from raw materials through increased processing. This spirit is especially marked in the important Arkansas Farm Bureau Federation. It is quite likely that when the 1946 census of manufactures is completed, results will show a substantially higher gain for Arkansas manufacturing than for the nation as a whole. Arkansas is trying to make that trend even more pronounced for the future.

## Look to LUNKENHEIMER for STEEL VALVES



### ...This Mark is Your Assurance of Highest Quality!



● Long skilled in the manufacture of valves and ever responsive to industry's needs, Lunkenheimer pioneered in the development of Steel Valves.

With the application of higher and higher temperatures and pressures, operating conditions became increasingly severe. Lunkenheimer was ready with valves fabricated from materials that met the most exacting requirements.

And as new problems arise, Lunkenheimer metallurgical research, engineering knowledge and specialized manufacturing facilities can be depended upon to aid in their satisfactory solution.

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See the latest Lunkenheimer design of 1500-lb. S. P. Steel Breech Lock Gate Valves with Seal Welded Bonnet

In Attendance: FRANK P. RHAME, President; HARRY A. BURDORF, Vice-President in Charge of Sales; WM. CARSON, Sales Engineer; FRED H. HEHEMANN, Chief Engineer; JOHN W. BOLTON, Chief Metallurgist; ALLEN W. LANDER, Eastern Sales Manager; WM. J. ANGERT, Manager, New York Branch.

2500-lb. S. P. Alloy Steel Gate Valve, with all-welded By-pass, welded in Seat Rings, Seal Welded Bonnet with Breech Lock, Welding Ends, Bevel Gear Drive.

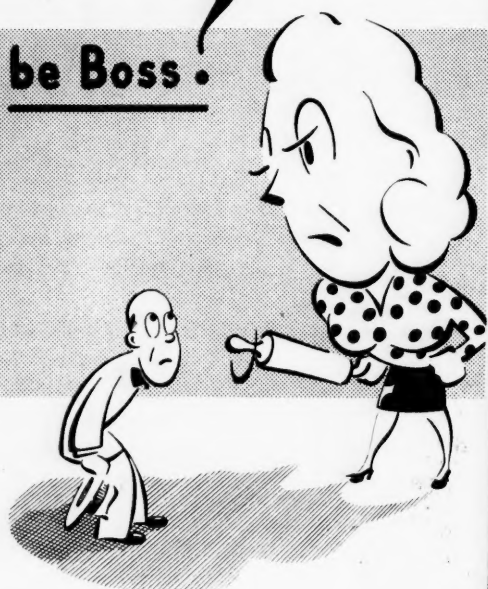
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(BAWI Means Balance Agriculture with Industry)

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MISSISSIPPI  
★ THE BAWI STATE ★

## Railroad Freight Car Exports

Export shipments of railway freight cars are in no way impeding the delivery of domestic cars, the American Railway Car Institute recently asserted, in answer to charges that foreign business is diverting the efforts of the car building industry from much-needed production for American railroads.

"There is nothing holding up production of freight cars for domestic or foreign use but a critical lack of materials," the Institute stated.

"Lack of vital materials, not production of cars for export, is the bottleneck in the car building industry today, as of other industries.

"Foreign orders, primarily for shipment to France, were placed with car builders many months ago at the instance of the State Department and as a direct part of the government's policy of economic rehabilitation in Europe. At the time these orders were received, orders for domestic production were not on hand in any substantial quantity. Materials for foreign cars were thus ordered in advance of materials for many of the domestic cars now undelivered. Moreover, these materials are to a large extent different in specifications from those used in foreign cars and could not be diverted for use in domestic car building."

Mr. Felton, the Institute's president, stated that during September only 671 foreign cars were delivered and pointed out that this is the rough equivalent of but 335 domestic cars, since most foreign cars are smaller in size. Deliveries of foreign cars for the entire year to date total 5,693.

Addressing himself directly to an assertion that Mexico has been getting cars at a time when this country seriously needs them, Mr. Felton said that actually the purchase of new cars by Mexican railroads gives relief to car shortages in the United States.

"The export of 1500 standard 50-ton box cars to Mexico during 1946, fulfilling a contract placed with an American builder by the National Railways of Mexico, relieves the shortages of cars on U. S. railroads by an equal number of cars. Several thousand United States-owned cars have been in service in Mexico for the past several years. Box cars of U. S. and Mexican railroads are regularly interchanged and war conditions caused many cars to go and remain south of the Rio Grande. An agreement between United States railroads and Mexican railroads assures the return to this country of an equal number of cars for all new cars delivered to Mexico, so the delivery of new cars to Mexico means a net gain of cars in use in the U. S."

During the first nine months of this year, 224,330 cars were delivered to American railroads by car builders and 7,389 by railroad shops for a total of 31,719.

"The problem is not one of production of domestic cars vs. production of export cars but of inadequate materials for needed production in either category. If steel and other vital materials were available in required amounts, the car building industry right now has the capacity to produce sufficient cars to meet domestic requirements plus requirements for foreign cars."



# DAVIS CYPRESS TANKS



## We Didn't Create Cypress

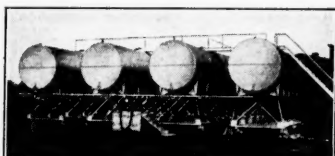
but we have been adapting and using it for tanks for 56 years, for mills, towns, railroads, etc. Let us hear from you.



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## SOUTHLAND PRODUCTS

—WELDED OR RIVETED—



We now manufacture and offer to the trade tanks in all sizes for pressure or gravity work. Also other steel equipment of either

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OR RIVETED  
CONSTRUCTION

This applies to field as well as shop built equipment.

Write us for information and quotations.

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Piling, Poles, Lumber, Cross Arms,  
Cross Ties

Also Wolmanized Lumber

Decay and Termite Proof—Can Be Painted

Docks for Ocean Vessels



American Creosote Works, Inc.  
New Orleans, La.

Atlantic Creosoting Co., Inc.  
Norfolk, Savannah, New York

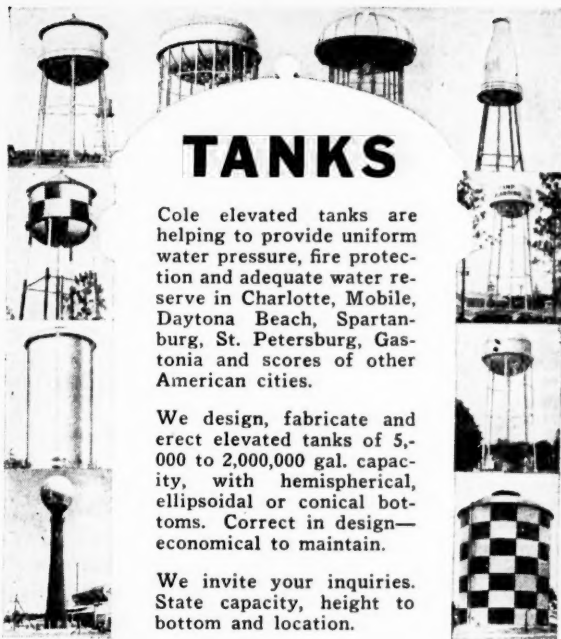
Plants at: New Orleans; Winnfield, La.; Louisville, Miss.;  
Savannah, Ga.; Jackson, Tenn., and Norfolk, Va.

## TANKS

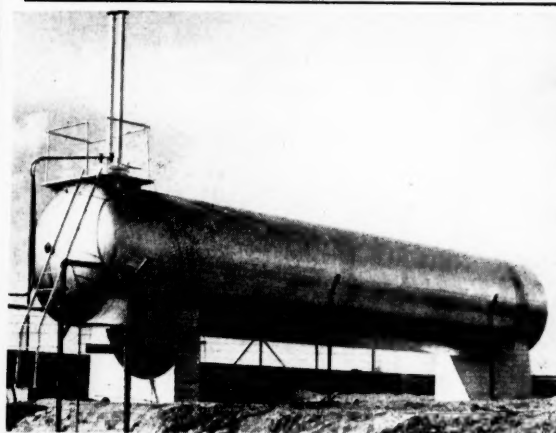
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We invite your inquiries. State capacity, height to bottom and location.



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LANCASTER IRON WORKS, INC.  
LANCASTER, PENNSYLVANIA

## C. & P. Telephone Program

(Continued from page 68)

tem program which may require expenditures of well over two billion dollars in the next ten years. Top officials of the C. and P. point out that a program of this size and scope will require huge amounts of new money, materials and "know how." They recognize the problems ahead of them but there is no question on their part that the jobs won't be done successfully in the shortest possible time.

## Air Freight Service

(Continued from page 35)

miles from Oklahoma City, was selling his first order out of the shipment by 4 p.m. on September 12.

A more recent example of the importance of Mistletoe's pick-up and delivery of air freight to business in Oklahoma occurred in October when the cotton market started plunging downward. At a time when holders watched cotton drop as much as \$10 a bale in one day, Mistletoe was picking up cotton samples and rushing

them via air freight to the larger cotton markets of the South.

Numerous incidents can be cited where the speedy delivery of machinery parts by air freight and Mistletoe to outlying oil fields has meant a great saving in money and wasted man-power hours.

Again, Mistletoe is opening new vistas to every town and cross-roads hamlet in Oklahoma. We say, "again," because pioneering in modern transportation has become habitual with this depression-born organization.

Back in 1931, railway service bogged down and the Oklahoma Publishing Company was threatened with a serious distribution problem for its newspapers. The company went about to establish its own statewide delivery system, organized a motorized express service, and called it Mistletoe Express. This improved service to readers and advertisers has been a major factor in the steady growth of the circulation of the Daily Oklahoman and Times.

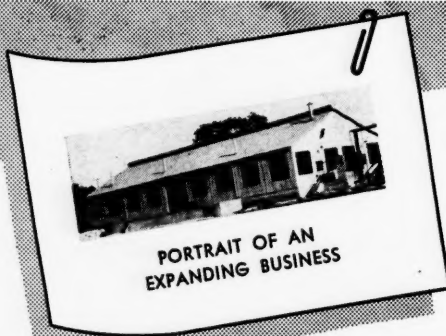
Today, 135 Mistletoe trucks, including the finest semi-trailer types

manufactured, operating out of one of the most modern terminals in the state, make 2 to 7 trips daily to 409 Oklahoma communities.

Where once Mistletoe's business consisted solely of newspaper cargo, this year its annual load will top 100,000,000 pounds, with only 19% of its tonnage represented in newspapers. Every day Mistletoe trucks travel more than 11,000 miles of Oklahoma highways; and 24 hour air-freight pick-up and delivery service along these 11,000 miles means the opening of rich new fields to business in Oklahoma, and the introduction of products heretofore unavailable in this newly expanded trade area.

When Robert W. Jackson, president of Aldens, Inc., Chicago, spoke on "Aviation's Part in Modern Merchandising" at the National Aviation Clinic in Oklahoma City, he said, "Very soon customers will be demanding not pre-war service—but a faster, more efficient service than they have ever known. Our only hope is to turn to the air, and in

(Continued on page 76)



PORTRAIT OF AN  
EXPANDING BUSINESS

## Famous for Quality CONSTRUCTION

If you need a new home for your business or to increase the floor space in your present location, consider the use of Allied Steel Buildings. We will completely engineer your special building from the analysis of your needs to the placing of the last piece of steel. Allied Steel Buildings are custom built and designed to meet your individual requirements.

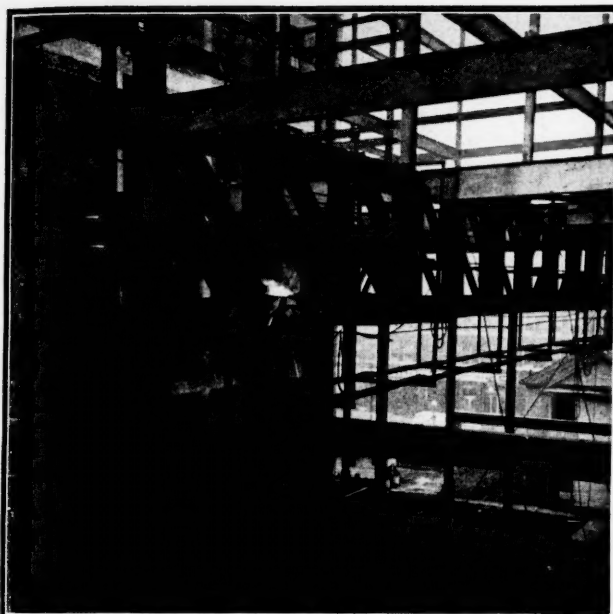
Allied Steel Buildings provide low initial cost, low maintenance and are quickly dismantled, (should the need arise) moved and re-erected

with nearly 100% salvage. Allied Steel Buildings can easily be lengthened or shortened; are weather tight and fire resistant. Installations in nearly every state attest their popularity.

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**ALLIED STEEL PRODUCTS CORP.**  
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*Unusually  
Heavy Trusses*  
**Electric Arc Welded**

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George Washington Hotel  
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AT LOWER COST**

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STRUCTURAL STEEL  
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Steel Structures, Conveyors, Bins, Mine Structures,  
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Steel Tank and Miscellaneous Plate Work

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*Structural Steel for all Industrial Structures,  
Buildings and Bridges*

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SMELTERS — REFINERS — FOUNDERS

P. O. Box 1336

ATLANTA, GA.



## Air Freight Service

(Continued from page 74)

fact we are probably more interested in air freight than any other business in the land."

Now that Mistletoe is making available air freight to the entire state through its modern terminals in both Oklahoma City and Tulsa, more and more Oklahoma business men, like Mr. Jackson, are delving into the potentialities offered them

by this service.

Merchants are quick to see the advantages of being able to sell to a maximum during peak demand due to the availability of quick delivery on reorders. They see a reduction of losses from mark downs on slow moving items. To the independent business man the freeing of capital through the reduction of inventory in transit is no small item. The extension of the trading area for perishable and timely goods to include

all of Oklahoma offers unusual opportunities for extra profit. This time element so vital to perishable goods is also of great importance in fashion merchandising. With air freight and statewide air-freight delivery, department stores and specialty shops throughout the state can feature apparel as fashion-fresh as in any fashion center.

On the other hand national distributors are looking forward to the use of plane load and combined lot air-freight shipments that can be quickly dispersed by surface carriers organized as Mistletoe Express is organized.

Looking back on the changes that have followed the introduction of many new and improved methods of surface transportation by Mistletoe Express, the innovation of a pick-up and delivery service of air freight promises new impetus to Oklahoma business. While retailer and distributors speed shipments and reduce inventories, while customer good will is being built up through the prompt delivery of scarce items, new markets of supply are being opened, new customers for new products are springing up in a trade area that has been greatly extended by this unique statewide air-freight network.

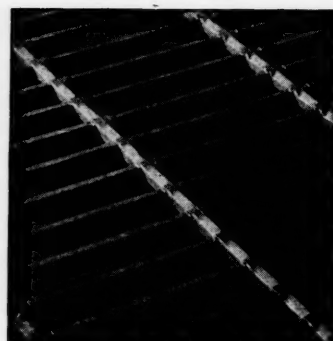
## The Real South

(Continued from page 34)

adjudged guilty and condemned by the people of the South.

Labor unionism on a national scale is now as arrogant, as unfeeling of the welfare of the general public, as dictatorial and ruthless as big business in the old days of "the public be damned" ever was, if not more so. Representing less than one-fourth of the working population, labor unions have now seized unto themselves certain privileges not accorded to any other groups of people. They have forced partisan courts and subservient political office holders who wanted votes to grant them immunity from responsibility for their actions in taking control of, and even destroying, property that does not belong to them, in staging strikes that tie up the whole national economy and endanger the national safety and welfare, in establishing a labor dictatorship that destroys the individual freedom of the American

(Continued on page 80)



## GARY WELDED GRATING

Send for attractive paper-weight sample, which is yours for the asking. Catalogues upon request.

Square edge bars for safe footing.  
Hexagonal cross bars for neat appearance.

**Gary-Riveted Grating :: Gary Stair Treads**

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BRASS • DIE CASTING ALLOYS • SOLDER • ZINC DUST**

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**SCREW MACHINE PARTS**

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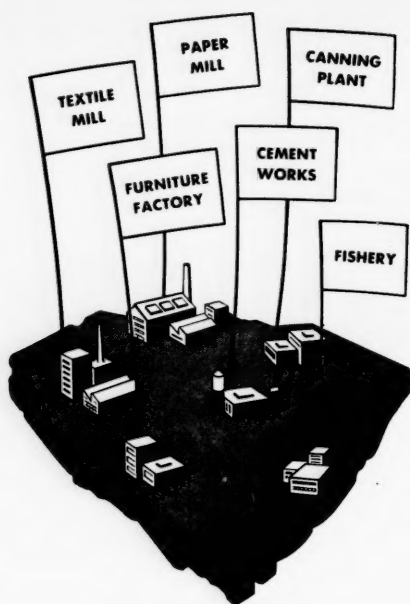
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Reversible Hammer Mills  
Impactors  
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## **Profit Motive is the Urge for Life**

A social and economic revolution has taken place . . . , and we are now facing an era when an even more violent and far-reaching revolution will occur because of the strong power of bureaucracy and the influence of labor on the side of bureaucracy; unless the American business man, who grows increasingly in skill, acumen, and farsightedness, reaches firmly into the muddle which is the projected revolution and extracts his place in the destiny of American affairs on the sound, firm basis of "capitalism," so-called.

The American business man is fighting against an aggressive, organized, and self-conscious trend made up of many institutions, of which the best that can be said is that their interests are self-interests. The American business man, by his very nature, is disorganized—will always be—could not exist except on the basis of his individuality, his freedom of expression, and his right to operate by his own skill, knowledge and experience.

I have known thousands of business men personally and seldom are they grasping, rapacious, wholly self-seeking, ultra-conservative, domineering. Almost never are they organized against forces for good. In fact, when they are organized, it is almost always on the side of good, and I speak of good in the sense of economic good for the body politic and for the population, which, as a business aside, is the consumer market.

The Profit Motive has been ridiculed, but the Profit Motive is the urge for life. It exists in the deepest-dyed bureaucracy, in the most fanatic Communist, in the crudest labor organizer; and whether it expresses itself in power or in money, the intent is the same. The Profit Motive is the natural human desire to add to one's stature and one adds to his stature by profit—profit in experience, profit in knowledge, profit in money, profit in position.

The American business man, despite talk of lobbies and paid institutional advertising, etc., is almost entirely without propagandists. His best propagandists are himself and his product and his buying public and his day-by-day devotion to his belief in his destiny, which is the use of capital and its turnover.

Therefore, without intending this to be a preachment, I urge seriously that the American business man clarify and strengthen his position in "the shape of things to come," by strongly defending his rights as employer, his rights as a skilled entrepreneur, his right to risk the fruits of his skill and experience in capital investments, and his rights under the Profit Motive. I urge the American business man to discuss this subject and all its ramifications with his friends and associates and to wield his influence editorially in this connection.

*From a letter by Douglas T. Sterling,  
Consulting and Management Engineer*



**Instantly Adjustable**  
**TO HEIGHT THAT'S RIGHT**  
**FOR ANY WORKER!**

Solve your industrial seating problems simply and easily by specifying Kewaunee Automatic Adjustable Chairs and Stools. Especially designed to insure correct body alignment, they adjust instantly to proper height without the use of tools or fussing with "gadgets." Merely raise seat and it stays put.



**Kewaunee**

**AUTOMATIC ADJUSTABLE CHAIRS and STOOLS**

Will fit any man or woman, tall or short, light or heavy. Available in 4 height ranges—12-15", 15-21", 18-27" and 24-36". May be had with adjustable foot rest if desired.

Write today for circular and full details. We'll be glad to send you a Kewaunee Automatic Adjustable Chair or Stool on 30 days' free trial—no cost or obligation to you!

C. G. Campbell, President

**KEWAUNEE MFG. CO., ADRIAN, MICH.**

**\*NEW TYPE HOMES\***

**Made from Florida Palmetto**

A new building material has been discovered. Unlimited supply of raw material. No Government restrictions, no priority.

Non inflammable; will not decay; termites will not attack; vermin proof. One or two stories, any number rooms.

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## The Real South

(Continued from page 76)

workman and makes him a slave to the rules and regulations imposed upon him by the unions, in an attempt to make it impossible for any American laborer to make a living for himself and his family without first paying tribute to a labor union.

It is these things to which the South is opposed. The people of the South—the people of the whole nation—must not be misled by the propaganda that the South is anti-labor or anti-union. Such propaganda is entirely false. The South is pro-labor and the South is pro-union, with equality under the law. The spirit of the people of the South is such, however, that the South is, and will remain, anti-dictatorship under whatever guise it may come, fascism, communism, or unionism.

When these current day writers, therefore, talk about a new movement in the South, a fermenting of new opinion in the South, they are only looking at the froth on top and not at the real South underneath.

And yet how is the public at large to know this unless the real South, which has perhaps been too busy attending to its own business, rises up and expresses itself? The unreal South is being spread-eagled before the public by writers from without the region who are either ill-intentioned or do not know what they are talking about and by a sprinkling of scalawag writers within the South who are catering to what they think is popular opinion, while the real South works. It is high time the picture be turned around to see what it looks like on the other side.

The real South must let the nation and the world know that it is advancing more rapidly economically than any other region of the country and within the not too distant future bids fair to be the most prosperous part of the land, that its handling of the race situation is unequivocal and is at the same time in the best interests of the Negroes themselves, that its Senators and Congressmen are representing the real South when they consistently oppose any and all efforts to abridge individual free-

dom and local self-government regardless of party affiliation, that it is poor taste to commiserate the South for its public officials regularly elected by popular vote of the people, that it does not expect to stand idly by and see its political leaders "purged" by parties or organizations not satisfied with the way these leaders vote, that it will not submit to the enslavement of Southern labor and the destruction of American ideals by power-drunk leaders of organized labor.

There is no question but that the South, during these later years, has held the balance of power in the nation. Nor can there be any doubt that there is being waged a concerted effort from many directions to wrest this balance of power from the South, and for a purpose that bodes no good to the preservation of democracy in the land. That is why the position of the real South must be made known, that is why the principles for which the real South stands must be made clear, so that freedom-loving people throughout the nation may rally to its support.

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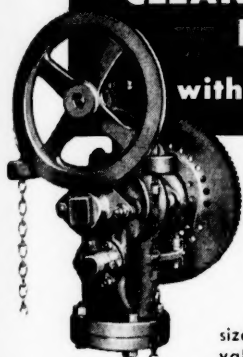
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## Manufacturers Record

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## Treated Reels Reduced Cable Breakage

To reduce cable losses caused by breakage of decayed reels, during the war it was necessary to pressure treat wood reel parts for service in Pacific theatres with Wol-

man Salts preservative, according to the U. S. Army Signal Corps. Reel breakage previously had resulted in losses of lead-covered cable estimated as high as 20 per cent.

The treatment was first used by the Signal Corps early in the war to protect square sawn poles for light loading tactical wire lines. It is one of several methods employed by the Signal Corps to tropicalize electrical equipment for service in areas where extremes of humidity and temperature expose many kinds of material to attack by fungi and insects.

Although fungicide dips have been used successfully to tropicalize wood cabinets and other housings not subject to severe exposure, pressure treatment was necessary for cable reels in order to thoroughly impregnate all parts with preservative chemicals. Officials point out that reels usually had been exposed to weather for a year while being assembled for new operations. They frequently rested in mud and water. As operations repeatedly outran construction, reels sometimes were handled 10 to 20 times before the cable was used.

Under these severe conditions, rims of heads on untreated wood reels often decayed to the extent that lag nails would not hold, lags disappeared, and heads were caved in. Rot was usually present in interior plies, Signal Corps officials declare. When these facts were reported from the field, a conference of Signal Corps and cable manufacturers followed. It was decided to ship cable in wood reels that had been tropicalized.

Processing was carried out at plants of the American Lumber and Treating Company in large vacuum-pressure cylinders. Reel and drum heads, lags and staves were treated to a retention of 0.35 lb. of Wolman Salts per cu. ft. of wood. A composition of sodium fluoride, dinitrophenol, sodium arsenate and fixative chromates, the preservative in the treated wood does not corrode lead-covered cable or metal fastenings and can be handled by workmen without skin irritation. Any effect on fire resistance or strength of the lumber is in the direction of increase rather than reduction.

## Textile Radio Program Scheduled for Sundays

Communities throughout the South will be featured periodically on "Our Community", a 30 minute radio show featuring Grady Cole, widely known radio personality and the Johnson Family. Announcement of the program which will be heard Sunday mornings at 8:30, was made by Dr. William P. Jacobs, president of the American Cotton Manufacturers Association.

The program, to be known as "Our Community", will be sponsored by the Cotton Association, in cooperation with the various state textile associations. Dr. Jacobs indicated that the purpose of the program was to depict the friendly community spirit existing in southern industrial communities, and that it was not intended to either defend or advertise the industry.

"We hope by means of this program," he said, "to show some of the friendly human relationships that exist in industrial communities." He added that the star of the show would be Grady Cole, one of the south's outstanding radio personalities, and that music of the sacred type would be furnished by the Johnson Family singers.

Stations included in the network are WBT, Charlotte; WORD, Spartanburg; WFBC, Greenville; WGST, Atlanta; and WAPI, Birmingham.

## Wide Mechanization Forecast

Accelerated purchases in the South may boost the total number of tractors on farms in the United States to 3,000,000 by 1950, according to estimates of the U. S. Bureau of Agricultural Economics. Continued rise in the adoption of mechanical power until it will practically eliminate hand and animal power is predicted. Specifically, it was forecast that mechanical cotton pickers would eventually be employed on a wide scale; haying procedure would be further mechanized; sweet potatoes, tobacco and other Southern crops would undergo mechanization, and that use of fertilizer would be in constantly increased quantities, all looking toward greater production at lower cost and less effort. In line with the prediction, there was an increase of 48,000 tons in Southern fertilizer sales in August over August, 1945, with percentage increases ranging from two per cent in South Carolina to 95 per cent in Oklahoma which hitherto has made less use of fertilizer than most of its sister states. Total sales for the South for August were 261,720 tons; for the nation, 367,185 tons. Virginia headed the Southern list in quantity with 54,921 tons.

## Aluminum Gains Popularity

Aluminum, produced so largely in the South, and predicted as being in for a protracted period of surplusage, suddenly turns up in short supply, and there undoubtedly are reasons. One reason is the growth of aluminum processing plants in the South. An example of these is to be seen in Georgia, near Marietta, where a new plant is engaged in making aluminum furniture. Launched in the unprecedented setting of a Dixie barn just before V-J Day, this promising business now employs 100 workers in five buildings, and is turning out thousands of units of its production each week.

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80—4,200 Gal. Cap. 9'2" x 8' Vertical  
30—10,100 Gal. Cap. 15'4" x 8' Vertical  
60—21,000 Gal. Cap. 21'6" x 8' Vertical  
15—21,000 Gal. Cap. 15' x 16' Vertical  
100—42,000 Gal. Cap. 21'6" x 16' Vertical  
30—42,000 Gal. Cap. 29'8" x 8' Vertical  
10—126,000 Gal. Cap. 29'8" x 24' Vertical  
6—221,000 Gal. Cap. 38'7" x 24' Vertical  
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6 jacketed tanks from 1,500 to 4,000 gal-  
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Elec.: 676, 1300, 1578, 2200 & 2850 Ft.  
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2—80 Ton 6 wheel switcher.

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Immediate Shipment  
**500 BBL. CAPACITY**  
New API Bolted Steel Tanks

9—High type Galvanized

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Dimensions are 15'4½" inside diam-  
eter x 16'1" high, Shell & Bottom &  
Cone Roof 12 ga. throughout.

Gross Weight—Approx. 9,000 lbs.

Net Weight—Approx. 7,000 lbs.

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10 ga. steel, Cone Roof 12 ga.

Gross Weight—Approx. 12,000 lbs.

Net Weight—Approx. 9,000 lbs.

All above tanks unassembled, com-  
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Section #1:  
167' at 16' from minus 10' to plus 36' elevation.  
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172' from 26' to 60' elevation.  
Section #3:  
160' travel over bunkers, belt tripper. Standard conveyor sections with all supporting steel, controls, motors, etc.

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ROTARY DRYER, about six feet by forty-five feet.  
TRUCK SCALES, to weigh about twenty tons.  
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1—Ingersoll-Rand 12 x 10 Class ERI 386 cu. ft. 100 lb. press. Good condition complete with drive, (less Motor)

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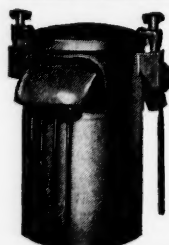
5—Automatic type LO-5 Low Lift Trucks capacity 5 ton, platform type. Equipped with towing coupler and bumper for pushing cars.  
7—New Yale & Towne, 4 ton capacity Hydraulic Hand Lift Trucks, platform type.  
1—3000 lb. Yale and Towne high lift truck.  
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Power plant equipment. Steam, Diesel, electrical, boilers, engines, turbines, generators new or used.

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We Rewind, Repair and Redesign all Makes and Sizes  
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SCIENCE AND INDUSTRY

## THE SOUTH'S NEXT OBJECTIVE

Prior to 1810 the South led the nation in manufacturing. The time is rapidly approaching for the South to assume this national industrial leadership again, a leadership which it relinquished in favor of growing cotton.

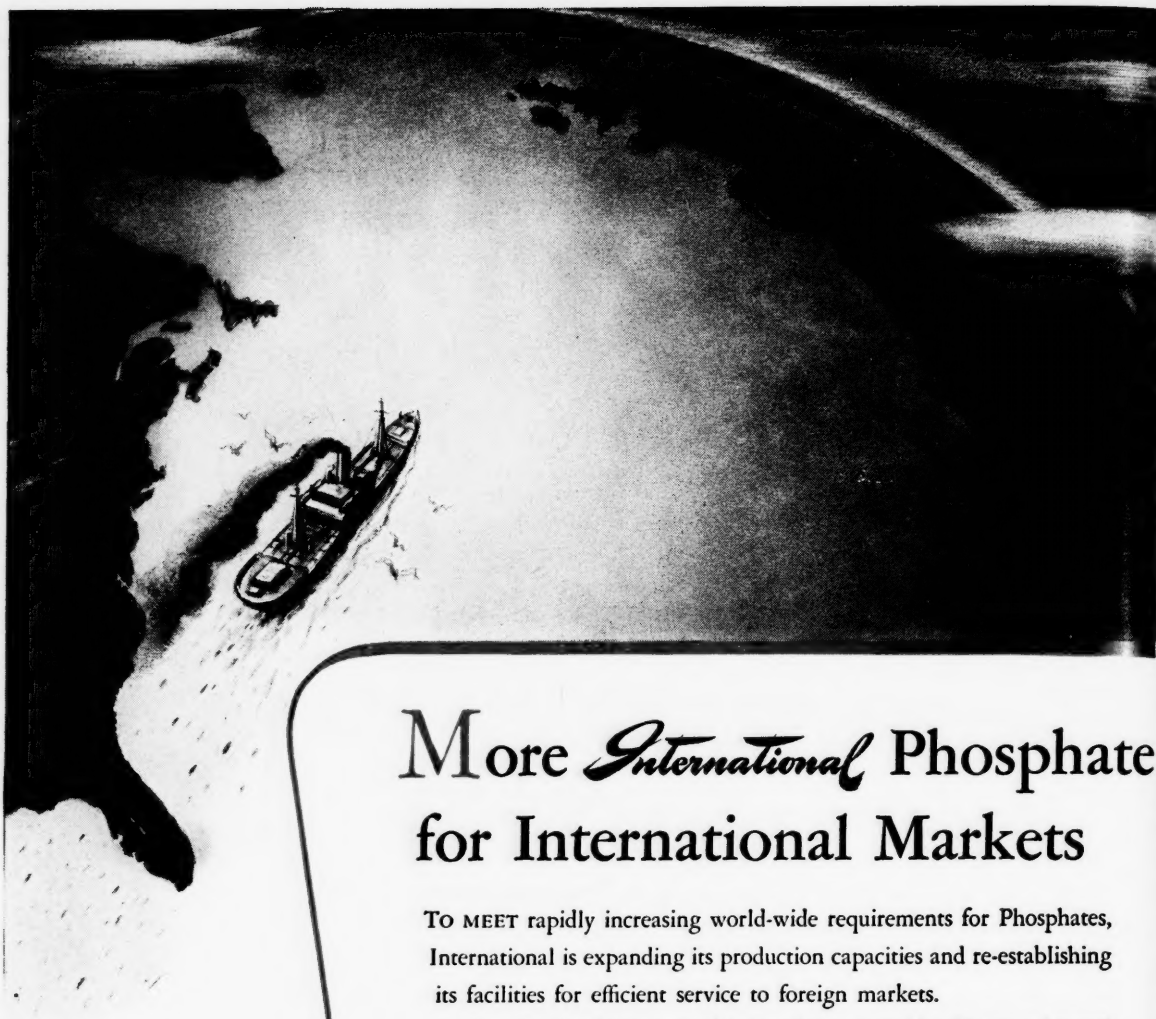
This former industrial eminence, together with the remarkable record of accomplishment in developing the South's vast natural resources since 1870, is well known by those who have followed the South's progress.

Today there are approximately 40,000 manufacturing plants in the South. They process materials and products which sell for \$25 billion. Most of the raw materials for these products come from Southern farms and mines. In spite of this, however, many raw materials and farm products are still shipped outside the South for processing, *and even more important*, most of its partly *processed* products are shipped elsewhere to be manufactured into finished articles. Airplanes, automobiles, electric motors, steam engines, radios and precision tools are just a few examples. The South is now ready to adopt and nourish enterprises of this kind. Its social structure is now ripe for the development of industries which will convert into finished products the natural resources with which it has been blessed.

Coinciding with the South's capacity to support finished products industries is the growing discontent of manufacturers in the over-crowded areas of the North and East. This discontent stems from many causes, not the least of which are subversive labor influences, work stoppages, high taxes and discriminatory State legislation. This discontent impedes manufacturers in their desire to furnish the nation with the goods it wants and needs. The South offers an attractive contrast.

The South needs more finished products industries. Many finished products industries need the South.





## More *International* Phosphate for International Markets

TO MEET rapidly increasing world-wide requirements for Phosphates, International is expanding its production capacities and re-establishing its facilities for efficient service to foreign markets.

An office has been opened in London to provide efficient sales and service to International's agents throughout the Continent and other foreign markets. An enormously increased supply of Phosphates will soon be available for both domestic and export markets as a result of expanded production facilities at International's Florida Phosphate mines. Noralyn Mine, now under construction at Bartow, Florida, will be the largest, most modern phosphate mining operation in America, when production starts in midyear, 1947.

International, whose leadership in the Phosphate industry covers a span of 36 years, will now, more than ever before, continue to play a vital part in increasing world food production by speeding essential Phosphates over the seven seas.

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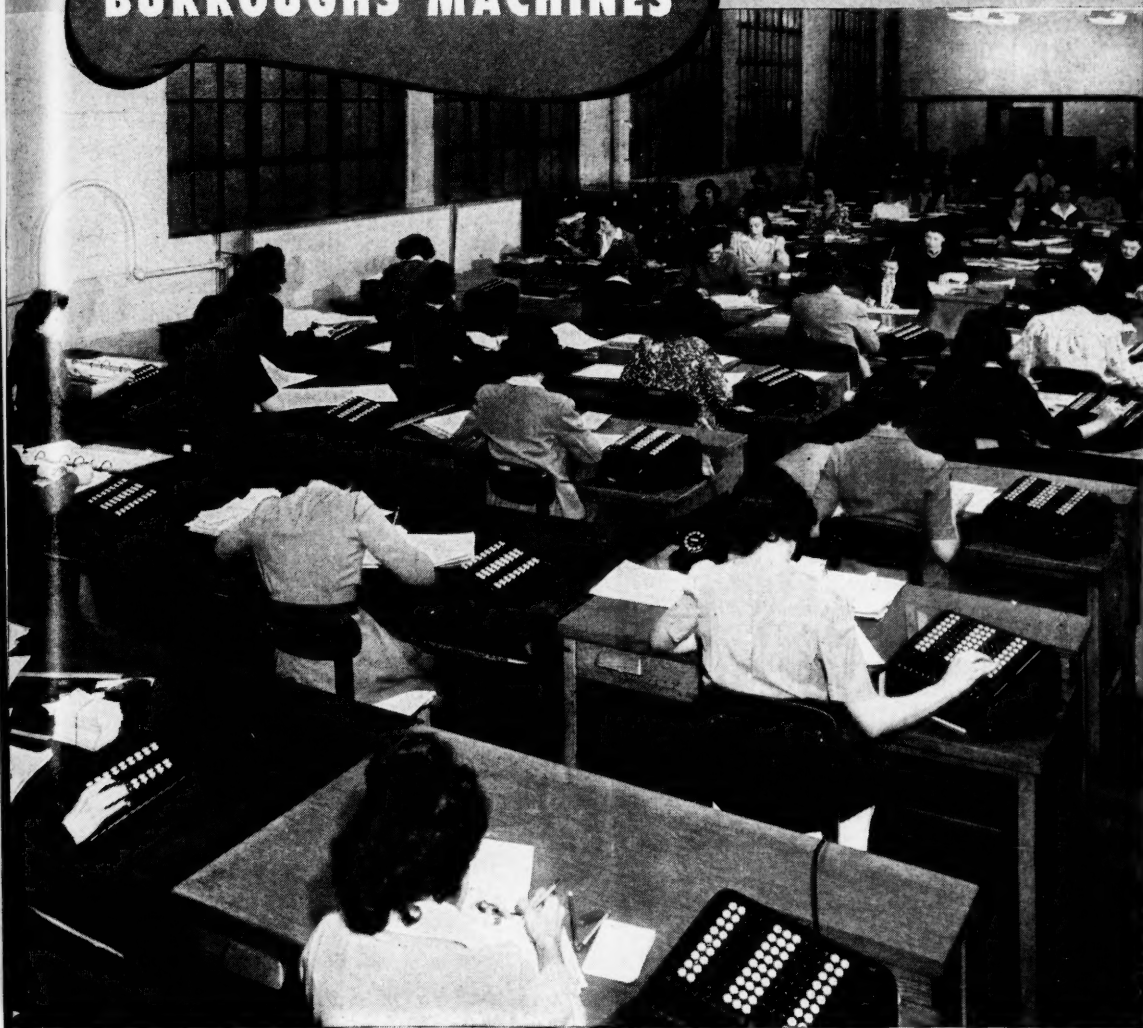
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Tennessee Phosphate Rock

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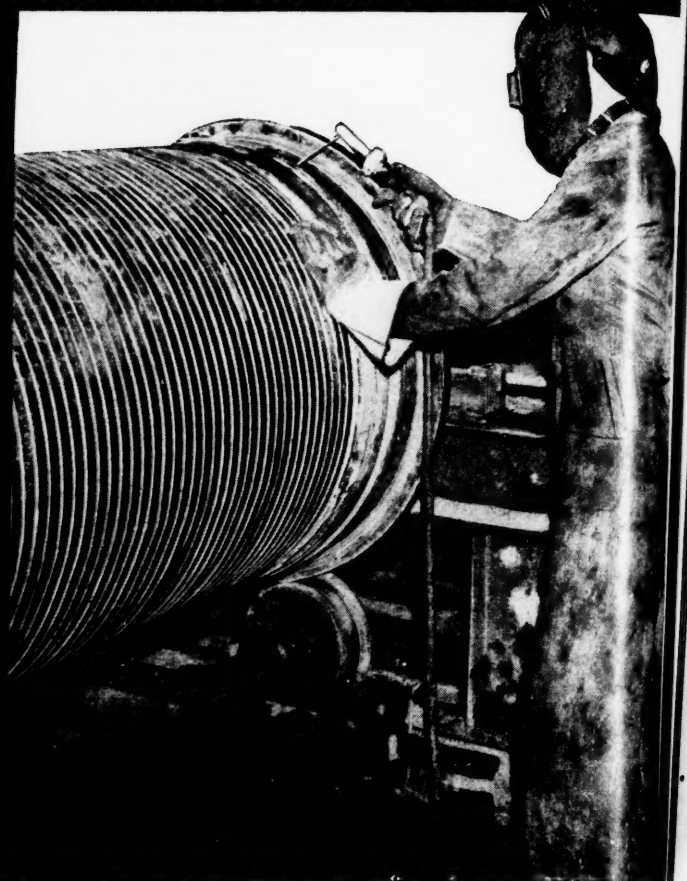
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ADVANTAGES OF PRESTRESSED CONCRETE CYLINDER PIPE • NO. 1

# Higher Pressure Ranges



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Lock Joint Pipe Company has applied the principles of prestressing steel in tension and concrete in compression in the design and manufacture of Lock Joint Prestressed Concrete Cylinder Pipe.

Retaining all the inherent advantages of the fun-

damental principles of Lock Joint pipe design, the use of high tensile steel makes possible still higher pressures in a greater range of sizes in keeping with Lock Joint economy of first cost and maintenance.

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Established 1905

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Lock Joint Pipe Company specializes in the manufacture, installation of Reinforced Concrete Pressure Pipe for Water Supply and Distribution Mains of large diameter as well as Concrete Pipe of all types for Sanitary Sewers, Storm Drainage Culverts and Subaqueous lines.

**LOCK JOINT**  
*Reinforced Concrete*  
**PRESSURE PIPE**



# MANUFACTURERS RECORD

ESTABLISHED 1882

*A Publication for Executives*

Volume 115 DECEMBER, 1946 Number 12

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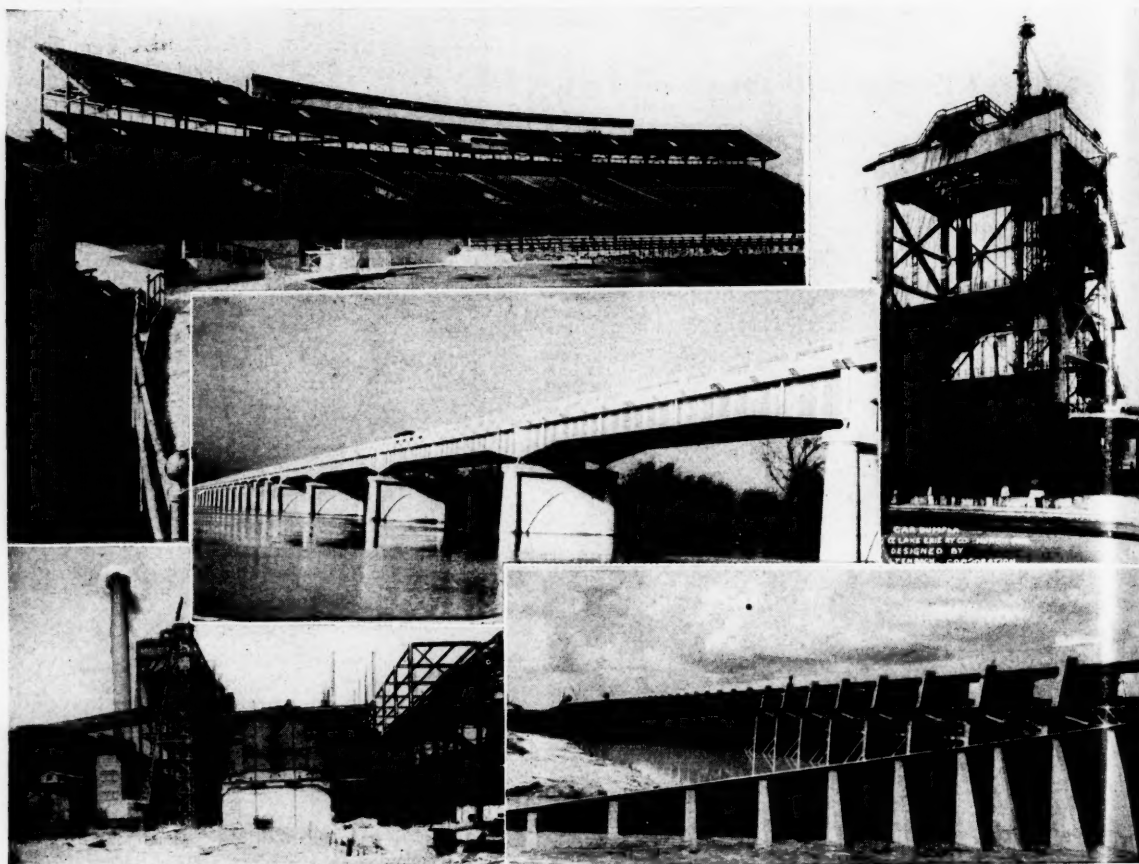
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All we do is Steelwork. All we've done for fifty years is structural steelwork for buildings and bridges of every size and design, industrial plants, power plants, mining structures, control gates, schools, churches, stadiums—in fact every type of construction required by a growing nation during peace and war.

Your construction job will benefit from the engineering, fabricating and erecting

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# NEW AND EXPANDING PLANTS

COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

## ALABAMA

**ALABAMA** — Coliseums — Agriculture Center Board, Montgomery, plans construction of 6 livestock coliseums in following locations: Selma, \$80,000; Decatur, \$60,000; Demopolis, \$22,000; Gadsden, \$22,000; Andalusia, \$37,500; Monroeville, \$37,500.

**ANNISTON** — Shop — Rudisill Foundry Co., has CPA approval for work on a cast iron pipe shop, cost \$34,000.

**BIRMINGHAM** — Merger — Public Service Commission approved merger of Alabama Natural Gas Corp. and Huntsville Gas Co., with Alabama Gas Co.; also authorized the Alabama Gas Co. to issue \$2,000,000 serial notes, in accordance with terms with Chase National Bank of New York.

**BIRMINGHAM** — Hardware — M-H Hardware Company, incorporated with E. T. Brown, Jr., Pres. and Associates; capital stock \$3,100,000; engage in general wholesale and retail hardware and manufacturing business.

**BIRMINGHAM** — Shop, Etc. — Tennessee Coal, Iron & Railroad, have CPA approval for construction of a pipe fabricating shop and storeroom at Fairfield works, cost \$42,000.

**BIRMINGHAM** — Building — Shaver-Pontiac Co., let contract to Day & Richardson, 2400 5th Ave., South, for construction of shop building, cost approximately \$30,000; masonry construction, structural steel.

**BIRMINGHAM** — Plant — Birmingham Milk Producers Corp., plan construction of one-story milk pasteurizing plant, cost approximately \$100,000; masonry concrete and steel construction.

**BLOUNTVILLE** — Plant — J. B. Faulkner and Associates, have CPA approval for a frozen food locker plant, cost \$30,000.

**DECATUR** — Grading — Calumet and Hecla Consolidated Copper Co., Wolverine Tube Division, N. Y. Bassett, general manager, Detroit, Mich., let contract to Ross Construction Co., Johnson City, Tenn., at \$98,000 for grading site of new copper and tube manufacturing plant for which Foster-Creighton Co., American National Bank Building, Nashville, Tenn., is general contractor at approximately \$120,000.

**GADSDEN** — Steam Plant — Commonwealth and Southern Corp., Birmingham, designing new steam plant, \$10,000,000 for Alabama Power Co., Thomas W. Martin, Pres.; initial capacity two units of 60,000 kilowatts each with provision for additional units.

**MOBILE** — Plant — M. S. Raplan Co., Ed Sienko, Chicago, Ill., surveying Mobile as a possible site for erection of a shipbreaking plant to make scrap out of vessels.

**MONTGOMERY** — Alterations — Greyhound Bus Co., received low bid at \$13,975, from Bear Lumber Co., for alterations to bus station.

**MONTGOMERY** — Factory — Dairy Producers, plan one-story milk processing and ice cream factory building; to cost approximately \$125,000.

**MOUNT MEIGS** — Building — State Building Commission, Montgomery, let contract to Butler & Cobbs, Montgomery at \$33,528, for construction of cold storage building.

**PRATT CITY** — Repair Shop — Pratt Shop Rail Transportation Works, will build a repair shop, to cost approximately \$97,800.

**TUSCALOOSA** — Paper Mill — Gulf States Paper Corp., has CPA approval for construction of a \$450,000 addition; work will be extended over a two-year period; will cost several million dollars.

## ARKANSAS

**BEARDEN** — Plant — Simons Manufacturing Co., has CPA approval for furniture factory; to cost \$19,800.

**BENTONVILLE** — Plant — Arkansas Farm Bureau Poultry Co-operative, has CPA approval for \$100,000 poultry processing plant.

**CAMDEN** — Shop — W. A. Daniel, has CPA approval for farm equipment, sales and service shop, cost \$27,000.

**GURDON** — Building — Gurdon Auto Sales Co., Horace Caba, President, let contract to E. E. Armbrust, North Little Rock, for construction of two-story brick building to house the Ford agency, cost \$30,000; to be located south of the intersection of U. S. Highway 67 and Main Street.

**LITTLE ROCK** — Shop — Reo Truck and Sales Co., has CPA approval for sales and service automotive equipment shop, cost \$5,000.

**PINE BLUFF** — Building — H. F. Trotter, let contract to Earl Roysse, Pine Bluff, for construction of one-story tractor and implement building, 202 East 5th.

**WARREN** — Plant — Cotton Oil and Manufacturing Co., has CPA approval for ice plant, at \$24,700.

## FLORIDA

**CORAL GABLES** — Storage Building — J. Lowry Electric Co., 114 Coral Way, let contract to Witters Construction Co., 1454 NW 17th Ave., Miami, for construction of storage building, 4010 Estancia Street, cost \$14,500.

**CORAL GABLES** — Building — Protect U. Awning & Manufacturing Co., 2752 SW 28th Lane, Miami, let contract to Mulford Stow, 2117 NW 17th Avenue, Miami, for one-story manufacturing building, 221 University Course, cost \$13,700.

**HALEAH** — Plant — Hialeah Industries, Inc., will construct one-story manufacturing plant, Douglas Road & East of Seaboard Airline Railroad, cost \$14,500.

**HALEAH** — Iron Works — Sea Shores Realty, Inc., Joseph Cohen, President, 420 Lincoln Road, Miami Beach, let contract to Maurer & Freberg Construction Co., 2511 NW 2nd Avenue, Miami, for one-story iron works building, 2366 W. 3rd Court, cost \$14,500.

**HALEAH** — Plant — Dixie Salvage Corp., L. Gelbron, Pres., 1200 Pennsylvania Ave., Miami Beach, has permit for manufacturing plant, NW 49th Street & 37th Ave., cost \$14,200; one-story, 50x100, CB-S and steel.

**JACKSONVILLE** — Publishing Plant — Florida Publishing Co., let contract to George D. Ancher Co., at \$190,000, for two-story publishing plant.

**JACKSONVILLE** — Plant — Joseph M. Ripley plans steel and concrete block manufacturing plant to be used as brick and glass brick mixing plant, cost \$250,000.

**MIAMI** — Plant — Florida Plywood Service, 77 NW 72nd Street, has CPA approval for plant; distributes millwork and plywood.

**MIAMI** — Storage Building — Miami Pineapple Plantations, S. K. Ferry, 18000 NE 6th Ave., Dade County, will erect one-story storage building, NE 5th Ave and Miami Garden Drive, cost \$27,500.

**MIAMI** — Warehouse — Cobbs Fruit & Preserving Co., 8200 NE 2nd Avenue, seeking permit for completion of warehouse, NE 79th Street & 4th Avenue, cost \$35,000.

**MIAMI** — Plant — Contract let for construction of plant for Borden's Dairy Division of Borden Co.; 3301 N. Miami Ave.

**MIAMI** — Addition — National Provision

entire has Communications Commission approval for new station on 1420 kilocycles, five kilowatts power and unlimited time.

**PENSACOLA** — Plant — International Minerals & Chemical Corp., has completed negotiations for acquisition of 10-acres of industrial property, for construction of a fertilizer plant; 180x210 feet long; will be capable of producing 20,000 tons of mixed fertilizer annually.

**TAMPA** — Expansion — Peninsula Telephone Co., Carl D. Brorin, Pres., studying experiments in mobile office-to-auto telephone service, as part of its \$3,000,000 post-war expansion program.

## GEORGIA

**GEORGIA** — Thread Mills — The Clark Thread Co. of Georgia, Austell, plans construction of 2 thread mills, at Albany & Thomasville, cost approximately \$300,000.

**ATLANTA** — Shop — Georgia Transportation & Realty Co., 700 Edgewood Ave., plans construction of a motor freight terminal warehouse and office building, W. Corner Boulevard & Irwin Street, cost \$93,000.

**ATLANTA** — Warehouse — Atlanta Oak Flooring Co., Atlanta, plans construction of a warehouse, cost approximately \$125,000.

**ATLANTA** — Warehouse — Associates Investments, Inc., 649 Whitehall St., let contract to J. D. Roberts, 1629 W. View Drive, for construction of a 3-story warehouse and office building, cost \$180,000.

**ATLANTA** — Office and Warehouse — Pittsburgh Plate Glass Co., 172 Marietta St., N.E., plans construction of a brick, one-story and basement office and warehouse, Memorial Drive, cost approximately \$300,000.

**ATLANTA** — Alterations, Etc. — Samuel Bingham Son Manufacturing Co., Corner Trinity Ave. and Garnett St., SE, let contract to G. Lloyd Preacher, Jr. & Co., for construction of alterations and addition to plant, cost \$50,000; 2-story and basement, reinforced concrete, jumbo brick, etc.

**ATLANTA** — Manufacturing Building — Link Belt Co., 1116 Murphy Ave., SW, plans addition to present building; to be one-story; to cost \$10,000.

**ATLANTA** — Office and Storage Building — Anderson Clayton & Co., let contract to Wesley & Co., 295 Hayden, N.W., for one-story office and storage building; to cost approximately \$35,000.

**ATLANTA** — Garage — Atlantic Greyhound Bus Lines, Charleston, W. Va., has plans and specifications for construction of a bus garage at cost of \$300,000.

**ATLANTA** — Mechanical Building — Atlanta Journal let contract to J. A. Jones Construction Co., Walton Bldg., for new mechanical building.

**ATLANTA** — Warehouse — Dixie Wine and Beverage Co., let contract to Mauritz Brothers, for construction of warehouse, corner Spring and Custalberry Street.

**ATLANTA** — Building — Fisher Body Plant, Sautell Ave., let contract to Ralph Didschuneit, for construction of a salvage building; structural steel, aluminum siding and roofing, concrete floors, etc.

**AUGUSTA** — Plant — Babcock & Wilcox Co., Refractories Division, Old Savannah Road, plans refractory products manufacturing plant, cost \$50,000.

**AUGUSTA** — Equipment — John P. King Manufacturing Co., have CPA approval for \$57,000 building to house air humidification equipment.

**AUGUSTA** — Warehouse — T. J. Carstarphen, 743 Green Street, let contract to W. F. Bruggeman, Augusta, for construction of one-story warehouse, 519 13th Street; concrete floors; 65x35.

**AUGUSTA** — Addition — John P. King Manufacturing Co., has CPA approval for boiler house addition to textile plant, cost \$33,250, and also for connecting wing to textile plant, cost \$63,000.

**BRUNSWICK** — Bus Station — Plans made for new bus station for Atlantic Greyhound Bus Lines; cost \$177,506.

**CHAMBLEE** — Factory — Joseph Albert, 1757 Noble Drive, will construct a one-story prefabricated factory building for manufacture of pottery, aluminum sides, concrete block floors, cost approximately \$10,000.

**COLUMBUS** — Addition — Swift Manufacturing Co., have CPA approval for construction of an addition to manufacturing plant, cost approximately \$50,000.

**COLUMBUS** — Manufacturing Plant — Georgia Webbing & Tape Co., have CPA approval for construction of a webbing and tape manufacturing plant, cost approximately \$35,000.

(Please turn to next page)

**Southern  
Industrial  
Projects,  
Expansions  
Total 295  
During  
November**

Co., Maurice H. Daum, 230 NW 5th Street, has plans completed for addition to meat processing plant, 230 NW 5th Street.

**MIAMI** — Addition — El Biscayne Cigar Co., 3022 NW 62nd St., Dade County, let contract to Rollins Construction Co., 54 NE 58th Street, Miami, for addition to plant, cost \$25,200.

**MIAMI** — Plant — Joseph Kehoe, let contract to Edward J. Gerrits, 262 NE 37th Street, for one-story manufacturing plant.

**ORLANDO** — Addition — Florida Pipe & Supply Co., has plans in progress for addition to house machine repair shop, cost \$15,000; 30x75; concrete block, concrete floor.

**ORLANDO** — Radio Station — Frank Katz-



**COLUMBUS** — Shop — Motor Sales Co., let contract to Jordan Construction Co., Andrews Road, for construction of one-story auto sales and repair shop, cost approximately \$35,000; concrete and tile floors, steel truss and built-up roof.

**COLUMBUS** — Warehouse — Bradley Realty and Investment Co., has CPA approval for a \$60,000 warehouse, 10th Avenue and 12th Street.

**COLUMBUS** — Packing House — Russell Packers, Inc., plan construction of packers building, cost \$45,000; brick veneer; one-story and basement.

**DOUGLASVILLE** — Factory — Cluett-Peabody Manufacturing Co., New York, contemplates construction of a shirt manufacturing plant, containing 20,000 sq. ft. floor space.

**DUBLIN** — Plant — M. T. Stevens Textile Co., Andover, Mass., let contract to C. M. Guest & Sons, Anderson, S. C., at \$764,980, for woolen fabric plant.

**HAZELHURST** — Warehouse — Blackshear Manufacturing Co., let contract to Gainey & Bennett, Hazelhurst, for construction of a fertilizer warehouse, cost \$50,000; 80x100, concrete block construction.

**JONESBORO** — Plant — Clayton County Coop Association, plans construction of fruit and vegetable processing plant, cost approximately \$25,000.

**LAGRANGE** — Textiles — Georgia Craft Textiles, Inc., incorporated with E. F. Powell and associates; weaving, cutting, dyeing, sewing, printing, finishing materials.

**LAGRANGE** — Bus Terminal — Teche Greyhound Lines, New Orleans, La., plan construction of bus terminal, cost approximately \$50,000.

**LYONS** — Addition — L. E. Traux has under construction a \$60,000 veneer plant on recently acquired 4½-acre site, just east of the city.

**LYONS** — Plant — Lyons Development Co., Lyons, contemplates construction of shirt manufacturing plant and remodeling of a section of the present building; 20x200.

**LYONS** — Plant — L. E. Truan, Washington Ave., will construct a plant to manufacture single ply veneer boards, cost \$60,000; to contain 10,000 sq. ft., concrete block and steel construction.

**MACON** — Plant — R. C. Scott, will construct a one-story bottling plant, on the new fuse plant road; CPA approval; owner builds.

**MARIETTA** — Warehouse — W. P. Stephens Lumber Co., 305 Church St., will construct warehouse, 105x105; corrugated metal siding, loading platform.

**MILLEDGEVILLE** — Plant — Pennington Freezer Locker Plant, C. A. Pennington, Sanitarium Road, will construct one-story packing plant.

**SANDERSVILLE** — Kaolin — Thiele Kaolin Company incorporated with Paul E. Thiele and associates; develop several mines of Kaolin in county.

**SAVANNAH** — Warehouse, Etc. — Carson & Co., ACL Wharf, contemplates construction of a warehouse and a turpentine bottling plant, cost \$15,000; CPA approval.

**VALDOSTA** — Building — B. D. Carter, 321 E. Central Ave., Valdosta, has CPA approval for construction of auto sales and service building, cost approximately \$20,000.

**WAYCROSS** — Plant — John H. Swisher & Son, Inc., Jacksonville, Fla., will soon call for bids for construction of brick, one-story cigar manufacturing plant, cost approximately \$100,000; reinforced concrete slab, steel truss roof.

**WAYCROSS** — Platform Shelters — J. L. Coe Construction Co., Charlotte, N. C., has contract for transfer shelters and platforms, for Atlantic Coast Line Railroad Co.

## KENTUCKY

**ASHLAND** — Refinery — The Ashland Oil & Refining Co., have leased \$16,000,000 refinery at nearby Leach to process high octane gasoline improvement program underway; costing \$100,000.

**CENTRAL CITY** — Factory — Central City Textile Co., has CPA approval granted for women's apparel factory, to cost \$85,000.

**LEXINGTON** — Plant — Central Kentucky Natural Gas Co., has let contract to J. F. Pritchard and Co., Kansas City, Mo., for design and construction of \$225,000 liquefied petroleum plant.

**LOUISVILLE** — Addition — Wood Mosaic Co., let contract to Hays & Nicoulin, 939 Franklin Street, for addition to factory, Highland Park, cost \$70,000; concrete floors; concrete foundation; one-story.

**LOUISVILLE** — Depot — Federal Truck Lines has CPA approval for freight depot, 14th and Liberty, cost \$13,750.

**LOUISVILLE** — Addition — B. F. Goodrich Chemical Co., Bells Lane, has CPA approval for additions to Geon plant, cost \$188,000.

**LOUISVILLE** — Grain Elevator — Indiana Grain Co-operative, Inc., Frank G. Rankin, Manager, plans erection of a grain elevator at 14th and Ormsby at cost of \$500,000; to have a capacity of 450,000 bushels.

## LOUISIANA

**ABBEVILLE** — Building — R. P. Farnsworth & Co. Inc., 1515 S. Salcedo St., New Orleans, have contract for telephone building for Southern Bell Telephone & Telegraph Co., cost \$10,000.

**ALBANY** — Plant — Marion T. Fannally, Inc., Ponchatoula, has completed plans for construction of new one-story food processing plant, cost \$35,000; CPA approval.

**AMITE** — Oil Plant — The Tangipahoa Tung Oil Co. Inc., plans new tung oil crushing plant.

**ARCADIA** — Ice Plant — Gulf Public Co., M. A. Knotts, District Manager, plans construction of a 20-ton ice plant; equipment purchased; cost approximately \$35,000.

**BATON ROUGE** — Building — M. W. Kellogg Co., Jersey City, N. J., will construct a wax deooling unit, and Jones and Laughlin Supply Co., New Orleans, will erect distillation plant, for Standard Oil Co., of New Jersey, \$146,975.

**BATON ROUGE** — Plant — Stone & Webster Engineering Co., Boston, Mass., have contract for design and construction of new building for drumming of Ethyl fluid at Ethyl Corp's plant, cost approximately \$357,000.

**BATON ROUGE** — Addition — B. Olinde & Sons Co., Inc., 102 North St., let contract to Buquet & LeBlanc, Baton Rouge, for remodeling and addition to present facilities.

**BERWICK** — Dredging — The Humble Oil & Refining Co., Houston, Tex., has applied for War Department permit to authorize dredging. Installation of timber dock and walkway in Atchafalaya River.

**HARVEY** — Building — Swift & Co., revising plans for proposed new dressing room building and approximately 30 to 40 lockers at their plant.

**HOUMA** — Bulkhead — The Magnolia Petroleum Co., Dallas, Tex., has applied for War Department permit to authorize construction of timber bulkhead and dredging along channel side in Bayou Terrebonne, near Houma.

**HOUMA** — Pipe Line — The United Gas Pipe Line Co., Shreveport, has applied for War Department permit to authorize installation and maintenance of 6-inch gas pipe line under and across Gulf Intracoastal Waterway, Mississippi River-Atchafalaya River Section at point about 3 miles east of intersection of Bayou Terrebonne with waterway near Houma.

**INDEPENDENCE** — Storage Plant — Bids received for cold storage plant for Colonial Cannery; to cost approximately \$240,993.

**LAKE CHARLES** — Addition — Davidson Sash & Door Co., has plans under way for new \$15,000 addition to millwork plant.

**MENEFEE** — Sawmill — Tremont Lumber Co., subsidiary of Joyce Organization, Chicago, will establish sawmill; planing mill and hardwood flooring plant at new location selected by Claude H. Lindsay, vice president and general manager; annual payroll \$250,000.

**NEW ORLEANS** — Tanks — American Brewing Co., 717 Bienville St., received bids for construction of 10 fermenting tanks and eighteen storage tanks; to be of steel plate.

**NEW ORLEANS** — Building — The Texas & Pacific Railway Co., 914 T. & P. Bldg., Dallas, Tex., let contract to George J. Glover Co., Whitney Bldg., at \$14,000 for building work, 207 St. Charles St.

**NEW ORLEANS** — Radio Station — I. W. Ricciuti, Archt., Queen & Crescent Bldg., have completed plans for new broadcasting station for Supreme Broadcasting Co., to be located in the Jung Hotel, cost \$15,000.

**NEW ORLEANS** — Loading Docks — Keasbey & Mattison Co. let contract to John Riess, Carondelet Bldg., for two-loading docks of concrete on crossotied piling at Plant No. 7 on property formerly occupied by Pendleton Shipyards; has CPA approval for \$75,000.

**NEW ORLEANS** — Factory — Paragon Tool & Manufacturing Co., 1544 Florida Ave., will construct new factory building on Industrial Canal near Bremer Road and Highway 30, cost \$25,000.

**ST. MARY PARISH** — Pipe Line — Interstate Oil Pipe Line Co., Shreveport, plans installation and maintenance of a 4-inch oil pipe line at Bayou Carlin.

**STERLINGTON** — Plant — Commercial Solvents Corp., J. E. Wheeler, plant manager, P. O. Box 1471, Monroe, let contract to Ford, Bacon and Davis Construction Corp., Monroe, for construction of new plant building to be erected at the chemical plant, cost \$174,630.

**THIBODAUX** — Plant — Mengel Company, Louisville, Ky., constructing plant to convert 500,000 ft. of logs monthly into veneer and lumber.

## MARYLAND

**ANNE ARUNDEL COUNTY** — Wharf — Walter Podroz, 5320 Georgia Ave., Washington, D. C., filed application with U. S. District Engineer, Baltimore, for permit to erect timber wharf and install 4 mooring piles at Selby-on-the-Bay.

**BALTIMORE** — Plant — Balseco Chemicals, Division of Baltimore Service Engineering Company, C. R. W. Thomas, Pres., 2002 St. Paul St., has acquired 2½ acres of land at Erdman and Mapleton Aves. as site for new plant to contain approximately 45,000 square feet.

**BALTIMORE** — Plant — Allan U. Bevier, Inc., Allan U. Bevier, Pres., 322 South Fremont Ave., has acquired five acres of land at Old Georgetown Road and Sexton St. as site for new plant.

**BALTIMORE** — Remodeling — Temple Upholstering Shop, George W. Luebbeke, 105 West Saratoga St., let contract for remodeling building at 121 North Greene St.

**BALTIMORE** — Building — Oriole Shoe Company, Louis Garonzik, Partner, has leased and is equipping 20,000 sq. ft. of floor space in building at 419-33 East Oliver Street, for production of women's camp moccasins.

**BALTIMORE** — Addition — Dorsett-Jones, Inc., Rowell R. Dorsett, Pres., adding 5,000 square feet of additional space at 521½ Fairview Ave.

**BALTIMORE** — Addition — Crown Cork & Seal Co., Inc. let contract to Consolidated Engineering Co., 20 E. Franklin St. for masonry addition at 4401-25 Eastern Ave., cost \$50,000.

**BALTIMORE** — Alterations — Monumental Radio Co., let contract to J. Raymond Gerwig Co., 1010 Morton St., for alterations for radio station and office building, 1102 N. Charles St.; cost approximately \$25,000.

**BALTIMORE** — Building — Baltimore Luggage Co., 105 W. Pratt St., let contract to Cummins-Hart Construction Co., 2023 N. Charles Street, for manufacturing building, 304 N. Smallwood Street; masonry; one-story; cost \$20,000.

**BALTIMORE** — Addition — The Doll Co., Inc. let contract to Piracel Construction Co. for addition to building, 148 S. Calverton Road, cost \$15,000; masonry.

**BALTIMORE** — Storage Building — Cero Steel Products Corp., has plans completed for storage building, 600 S. Canton Ave., cost \$20,000; masonry.

**BALTIMORE** — Terminal — James J. DeBoy, Inc., 232 N. Franklinton Road, has plans completed for freight terminal, 2401 W. Baltimore Street, cost \$10,000; masonry; one-story.

**BALTIMORE COUNTY** — Building — Eastern Stainless Steel Corp., let contract to Turner Construction Co., Essex, for construction of cafeteria and polishing building, Rolling Mill Road; frame and masonry; one-story.

**BETHESDA** — Radio Station — Willard D. Egolf, Pres., of Broadcasting Management Inc., broke ground for proposed radio station WACC, which will serve Bethesda-Cherry Chase, area.

**EDGEWOOD ARSENAL** — Plant — Diamond Alkali Company of Painesville, Ohio, has leased a plant for production of chlorine gas; W. L. Steinhaus, in charge of local establishment.

**POCOMOKE CITY** — Wharf — The Chesapeake Corp. of Virginia, has requested additional time of the U. S. District Eng'r., Baltimore, to construct timber wharf and fender system in Pocomoke River near Pocomoke City, as approved July 24, 1943.

## MISSISSIPPI

**BASSFIELD** — Factory — Jefferson Davis County Board of Supervisors, Prentiss, will receive bids for construction of new hosiery factory building to be occupied by Bassfield Knitting Mills; \$35,000 available.

**BILOXI** — Telephone Building — Southern Bell Telephone and Telegraph Co., plans new telephone building.

**BILOXI** — Warehouse — Frank P. Corso, incorporated with capital stock of \$300,000, plans \$12,000 warehouse for handling of tobacco, confections and other lines.

**CLARKSDALE** — Plant — Dr. Pepper Bottling Co., S. H. Farris, let contract to R. A. Crawford, for construction of new \$10,000 plant building on Fourth near Community Park; concrete blocks; two-story front.

**COLUMBIA** — Building — Sub-contract let for construction of building for Columbia Knitting Mills.

**FOREST** — Factory — Cape Cod Shirt Co., Fall River, Mass., to have plans released for construction of factory building for manufacture of men's shirts, cost \$135,000; building area 25,825 sq. ft.

**GREENWOOD** — Building — Henderson & Baird Hardware Co., have preliminary plans completed for construction of large new warehouse building, cost \$20,000; will have 600,000 sq. ft. of floor space.

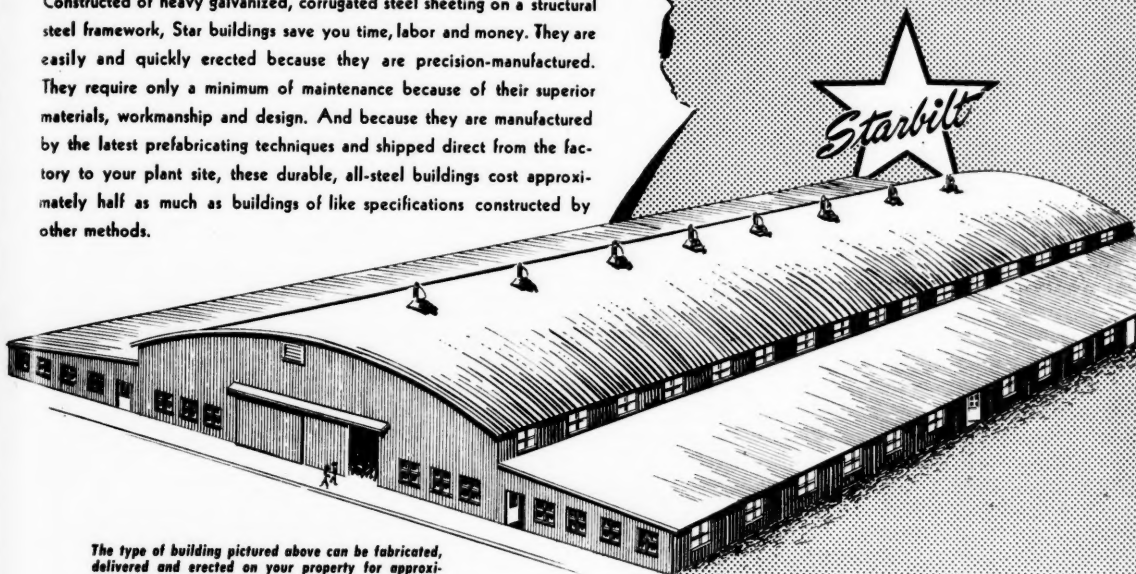
**HAZELHURST** — Garment Plant — City let contract at \$100,545, to Central Construction Co., Philadelphia, Miss., for garment plant.

**KOSCIUSKO** — Plant — Col. J. B. Pool has approval for construction of \$40,000 freezer locker plant; fireproof with brick veneer front while other sides will be built of concrete blocks.

**NATCHEZ** — Warehouse — California Company of New Orleans, La., let contract for (Continued on page 66)

# IF YOUR PLANT IS IN THE SOUTH?

Your postwar expansion needs can best be served by Starbilt sectional steel buildings---modern, fire-resistant buildings which combine permanence with flexibility, sturdiness with the economy of prefabrication. Constructed of heavy galvanized, corrugated steel sheeting on a structural steel framework, Star buildings save you time, labor and money. They are easily and quickly erected because they are precision-manufactured. They require only a minimum of maintenance because of their superior materials, workmanship and design. And because they are manufactured by the latest prefabricating techniques and shipped direct from the factory to your plant site, these durable, all-steel buildings cost approximately half as much as buildings of like specifications constructed by other methods.



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Yet it gives you the speed, ease and finished weld appearance of the best in the 6020 class.

P&H designed this electrode for today's fillet welding requirements. It's for AC or DC welding of medium and mild steels. Try "FW" on your work. Call your P&H representative today for demonstration.

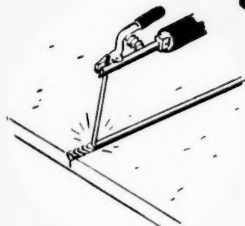


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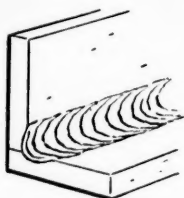
## FAST FREEZING

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Although "FW" is a downhand electrode, it can also be used for out-of-position welding by experienced operators. This saves more time — is another reason for its wide acceptance.



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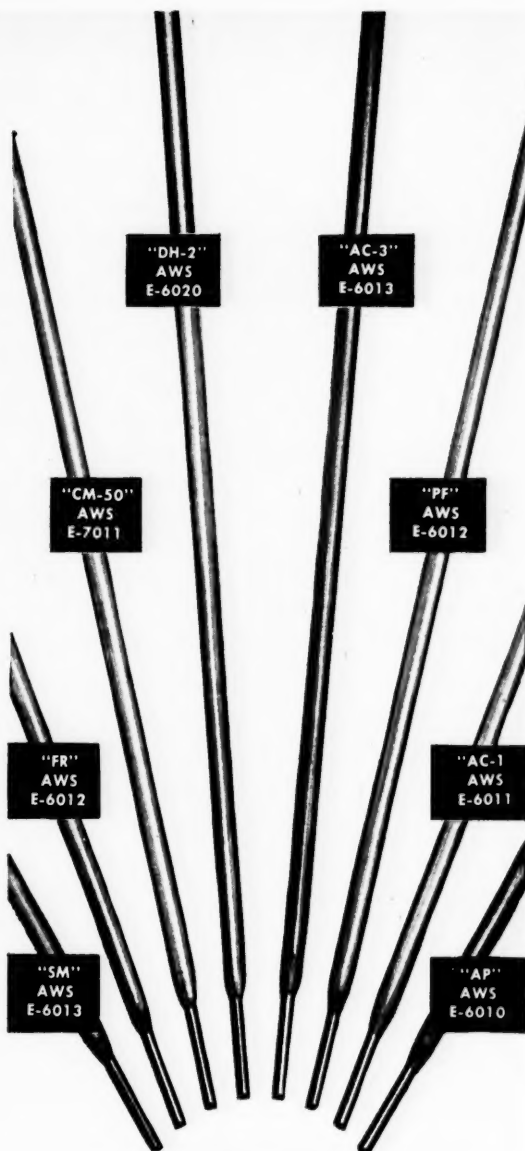
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## AMERICA'S MOST COMPLETE WELDING SERVICE



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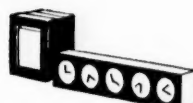
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HOISTS

# LITTLE GRAINS OF SAND

*"Little drops of water, little grains of sand,  
Make the mighty ocean, and the pleasant land."*

The tide of popular opinion has turned definitely against the abuses of organized labor's monopoly power. People in every walk of life are demanding legislation that will destroy these monopolies and achieve industrial peace. Direct losses in wages and lost production due to strikes mount up into the billions. Indirect losses in terms of shortages and rising living costs are incalculable. "Yes" is the only answer to the question "Had enough"?

"The law of supply and demand operating in the market place will, from now on, serve the people better than would continued regulation of prices by the government." This statement by President Truman which accompanied his order to remove all controls on wages and salaries and most price ceilings makes sad news for the long haired men and the short haired women who thought Washington was their permanent abode. The President's belated good word for an inexorable natural law announces the return to an attitude of governmental common sense for private enterprise.

The building of hundreds of thousands of new freight cars of many types is probably America's most critical production problem right now. Without enough freight cars of the proper kinds on the rails raw materials will not reach factories fast enough and finished goods will pile up faster than they can be moved to markets. In either or both of these cases production will be reduced and lay-offs of employees will be inevitable.

The Reconstruction Finance Corporation, born of the depression before the days of the New Deal, has outlived its usefulness. It should be liquidated and the lending functions for which it was originally created should be returned to the field of private banking. Such action would implement the purpose of the Federal Reserve Act and strengthen the position of the Federal Reserve System in its guidance of the national credit situation. It would eliminate a government monstrosity and return credit decisions to bankers and business men who are best qualified to estimate individual "risks."

In a recent public address Secretary of the Treasury Snyder said: "It is pure fantasy, if not plain demagoguery, to talk of tax reduction and debt reduction in the same breath." We most emphatically disagree with the Secretary. It is possible, not only to talk about, but to accomplish tax reduction with debt reduction —when they are coupled with waste reduction.

Number 100 in a series of "Gulf South" ads published by the United Gas Pipe Line Company appears in this issue. This company, under the leadership of its president, Mr. N. C. McGowan deserves the congratulations of all of us for its persistence in calling the attention of the nation to the fact that the South, because of its matchless material wealth, its intelligent and loyal native labor and its beneficent climate is the ideal section in which to locate "finished product" manufacturing.

Reasons for employer and employee dissatisfaction with profit sharing, as shown by an analysis prepared from a survey by the National Industrial Board are mostly from the employees' lack of understanding of the principles involved and their inability to comprehend the influence of the business cycle on profits. "The profit-sharing plan apparently works fairly well as long as the company prospers, but dissatisfaction arises when profits diminish or disappear."

An elastic fabric without rubber has been developed in the textile laboratories of United States Rubber Company. The elasticity is achieved by twisting cotton yarn into the shape of a coil spring.

The new fabric is known as Strex. It can be made in various degrees of elongation, with a maximum of 100 per cent. It will withstand repeated laundering or dry cleaning. Uses so far developed include slipcovers, gloves, sweaters and surgical bandages. It has a lower degree of tension than Lastex and similar materials deriving their elasticity from rubber.

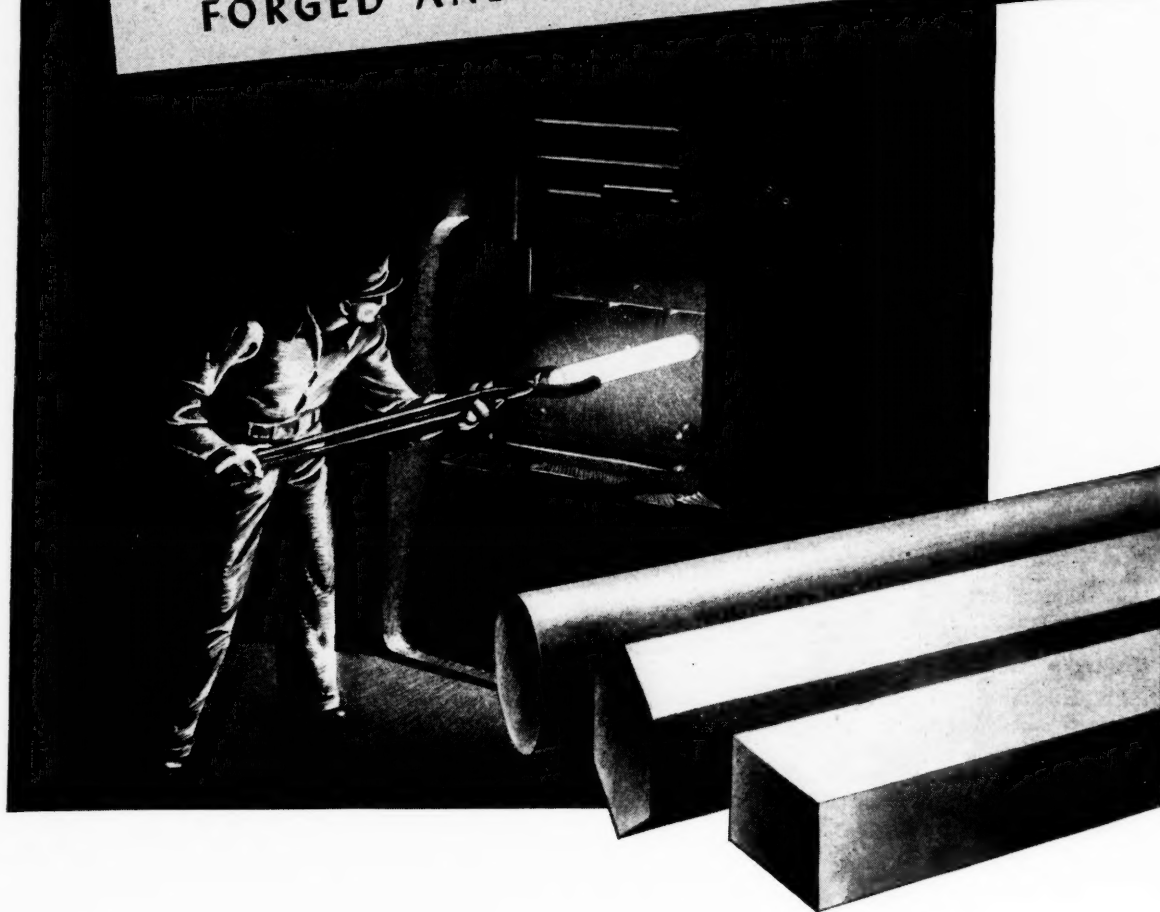
In the first nine months of 1946, mortgage financing approximated \$7.7 billion, nearly double the total for the corresponding 1945 period, reports the Federal Home Loan Bank Administration. Savings and loan associations accounted for 34 per cent of the total, banks and trust companies 25 per cent, and individuals 20 per cent.

If uninterrupted, the current high rate of nail shipments should relieve the widely reported shortage of this product within the next few months. During September nail shipments were equivalent to the highest peacetime annual rate since 1923 when 789,-

(Continued on page 16)

# JALLOY

THE HARD, TOUGH STEEL FOR  
FORGED AND HEAT TREATED PARTS



JALLOY is a special steel particularly applicable for machine parts that are subjected to dynamic stresses, sudden shocks or abrasive action. It can be forged and heat treated to obtain the desired physical properties. Write for further information.

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DECEMBER NINETEEN FORTY-SIX





# King Cotton

## GOES TO COLLEGE

● King Cotton may have considered himself rather old when he started to study progressive, scientific methods of cultivation. There were those who thought he was past his prime, that he couldn't earn a living for himself and the millions who depended on him. They were afraid that the billions of dollars invested in Cotton would turn out to be just so much exhausted soil, scrap iron and worthless good will.

But study, education and research by agricultural colleges and extension services have proved that King Cotton is still young and vigorous, and capable of contributing much to a stable, prosperous southern economy.

An authoritative report about cotton prospects in Alabama recently released is indicative of the trend throughout the entire South. In 1900, Alabama produced 177 lbs. of cotton to the acre. In 1944, the average yield was 339 lbs. per acre. Another improvement, especially noticeable since 1930, is in quality. In that year, only 6.1% of Alabama's cotton had a staple length of 15/16" and longer. 97.9% of Alabama's cotton was included in this classification in 1945. Varieties have been reduced from 30 to 4. Good ginning and adhering to uniformity in grading, packing and classing has increased the value of Alabama's cotton crop by 5 to 10 million dollars.

One observation in this report of especial interest to farmers and to all who advocate diversified farming in the South is this: "Records show that in most areas the greatest income is made by



*balancing cotton and livestock so as to make best use of land and labor."* The first two recommendations of the report are these:

1. Grow cotton in a balanced farming system including other enterprises to make good use of land and labor and to increase income.
2. Grow cotton in a good soil management program including proper terracing, full use of soil-improving legumes, and rotation.

The findings of this report are very encouraging to us at the Tennessee Coal, Iron & Railroad Company. For many years, we have spent time, effort and money to stimulate interest in diversified farming and soil conservation as means of increasing southern farm incomes. We believe a prosperous South depends on profitable farming, and we shall continue to use our research and promotion facilities to help raise the farmer's purchasing power. *Whatever helps southern agriculture helps all southern business.*

## U-S-S Steel Products made and distributed by T.C.I. include:

- Rolled, forged and drawn steel products.
- Structural shapes, plates, bars, small shapes, agricultural shapes, tool steel, strip, floor plate, cotton ties.
- Steel sheet piling and H-bearing piles, bridge flooring.
- Concrete reinforcing bars, reinforcing mesh.
- Black, galvanized and special finish sheets.
- Wire and wire products, including woven wire fencing, barbed wire, bale ties, nails.
- Electrical wires and cables, wire rope, strand.
- Rails, track accessories, wheels, axles, forgings.
- Culverts.
- U-S-S High Strength Steels and U-S-S Abrasion-Resisting Steels.
- U-S-S Stainless Steel.
- Ground Open Hearth Basic Slag.



## TENNESSEE COAL, IRON & RAILROAD COMPANY

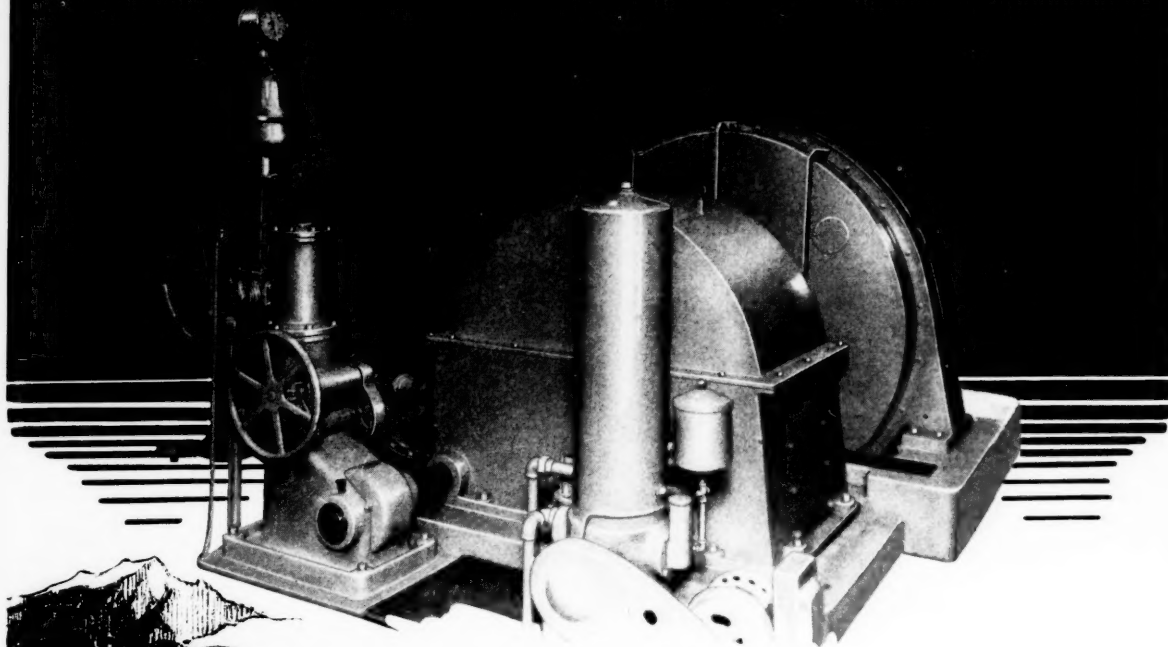
General Offices: Birmingham, Alabama

District Offices: Birmingham · New Orleans · Memphis · Charlotte · Jacksonville  
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United States Steel Export Company, New York

# UNITED STATES STEEL

# Get More Production *out of* WATER POWER



**W**HY put up with inefficient equipment, that gives only mediocre performance, when you can improve power efficiency by modernizing your present plant? Why continue to let obsolete, or poorly-functioning machinery cut down your production and eat into your profits?

Take, for example, a City which recently installed a new Smith-Kaplan Turbine. This unit replaced two old-style turbines, retired a Diesel Station to stand-by service, and brought about expansion of local industries, resulting from increased electric current available at low cost.

### ***Why not enjoy such benefits?***

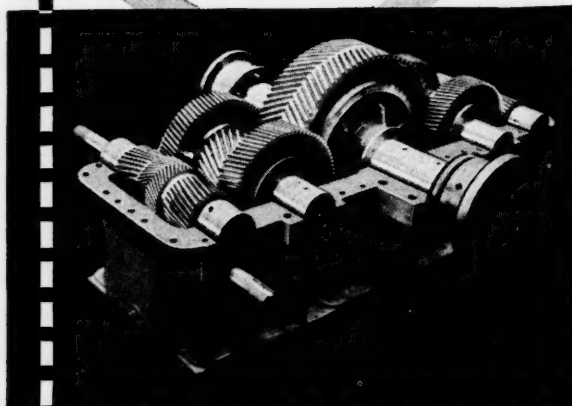
The present demands the utmost of industry. Avail yourself of our experience, and the help of our technical staff, in working out the *solution to your problem!*

*If It's Hydraulics Put It Up to Us.*

**S·MORGAN SMITH COMPANY**  
YORK·PENNSYLVANIA·U·S·A·

## **POWER *by* SMITH**

# what about sykes gears?



**W**e're in a position to furnish quick deliveries on Sykes gears which are made to EARLE standards and to your specifications. For medium and heavy machinery—where precision, smoothness, strength and economy are essential—EARLE Sykes-Type Gears lead the field.

And here's why. They're *precision* cut—and maintain precision operation. They're *smooth*—insure constant and uniform transmission of power by distributing the load across the entire gear face. They're *strong*—built ruggedly, for long life. They're *economical*. Let us quote you on your needs—for Sykes, as well as spurs, helicals, herringbones, worms, or racks.

THE EARLE GEAR & MACHINE CO.,  
Main Office: 4719 Stenton Avenue,  
Philadelphia 44, Pa. SALES OFFICES:  
149 Broadway, New York 6, N. Y.; 901  
Davis Avenue, Pittsburgh 12, Pa.; P. O.  
Box 1633, Tulsa 1, Okla.

**EARLE GEARS**

(Continued from page 12)

000 tons of nails were shipped. The total for September at 59,875 tons represents an annual rate of approximately 720,000 tons. A major reason for the present nail shortage has been the prolonged effect of the loss of over 50,000 tons of wire nail and staple production because of strikes in early 1946.

General purpose synthetic rubber will be able to compete successfully with natural rubber only if its present quality is improved and its cost of production reduced. Hope is rising in official circles, however, that these two objectives can be achieved by the end of 1947. As a Department of State Bulletin puts it, "after that time there is a good possibility that the results of research now under way together with the competitive self-interest of rubber, petroleum and chemical industries will have established an industry which can exist without support."

*Labor's Monthly Survey*, publication of the American Federation of Labor, expects a "definite downturn" in prices of food and other consumer items early in 1947. It agrees with "careful business observers" that a "mild business recession" is about to take place. But, argues the AFL organ, new wage increases would mitigate this recession. Apparently the AFL sees nothing paradoxical in urging higher wages while it predicts lower living costs.

Charles W. Moore, director of market research for SKF Industries, Inc. predicts that by 1950 the nation's six million farmers will be operating three million tractors.

The removal of price controls should result in an increased supply of Southern Pine, from the standpoint of volume, as well as of items, sizes and grades of lumber for housing. Since the ready availability of these items was seriously handicapped by unrealistic controls, it is expected that there may be a temporary rise in the prices of these items which have been in short supply. However, a return to normal planning and operations should now permit manufacturers in the industry to concentrate on the production of items, sizes and grades for which there is the most critical need.

It is anticipated that the market will soon adjust itself to a level not far removed from ceilings which existed with the termination of price controls, or at least from those for which the industry had petitioned.

Rising costs of supplies, payrolls and other expenses will make it impossible for the nation's hotels to operate at a profit even if sales volume drops only to 1942 levels, while a return to prewar business levels would mean bankruptcy for many. Citing operating figures of a large, efficiently operated transient hotel, J. E. Frawley, Board Chairman, American Hotel Association states "In 1942 occupancy approximated eighty per cent of capacity and net profits before federal taxes on \$100.00 of net sales was seven dollars.

(Continued on page 18)



# What keeps the rhino feeling right

can end your roofing worries!



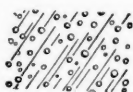
Over 90 years of successful roofing experience has demonstrated the sound value of the slag or gravel wearing surface of a Barrett Specification Roof:



**1.** The gravel or slag wearing surface holds in place the heavy poured (not mopped) top coat of coal-tar pitch—providing a doubly thick waterproof covering.



**2.** It provides protection against the sun's actinic rays which otherwise dry out the valuable oils in roofing bitumens.



**3.** It protects the roof against mechanical damage, hail and wind, wear and tear.



**4.** It interposes a surface of fireproof rock between the building and flying embers—makes a roof that carries Fire Underwriters' Class A Rating.

Life is rugged for the Rhino, but he never seems to mind. Why should he worry? He knows his *armored wearing surface* will protect him from his natural enemies.

The Barrett Specification\* Roof, with its armored wearing surface of gravel or slag, gives equally sturdy protection to buildings. It's so long-wearing it can be bonded against repair and maintenance expense for as long as 20 years.

Built up of alternate layers of coal-tar pitch and felt, topped by an extra-thick pouring of pitch to *anchor* the gravel or slag wearing surface, it is the toughest, longest-lasting built-up roof made. It is waterproof, fire-safe, sun-resistant and armored against mechanical damage.

Save trouble and expense on your next building project—insist on a Barrett Specification Roof. Remember, the Atomic Bomb Plant in Oak Ridge, Tenn., the Empire State and R. C. A. buildings in New York, and many other outstanding American buildings are Barrett-Roofed, too.



## THE BARRETT DIVISION

Allied Chemical & Dye Corporation  
40 Rector Street, New York 6, N. Y.

2800 So. Sacramento Avenue Birmingham  
Chicago 23, Ill. Alabama

In Canada: The Barrett Company, Ltd.,  
5551 St. Hubert Street, Montreal, Canada

\*Reg. U. S. Pat. Off.

### I'D LIKE TO TALK ROOF WITH YOU

I want to know about the condition of the roofs on my buildings.

Send your Roof Inspector to see Mr. ....

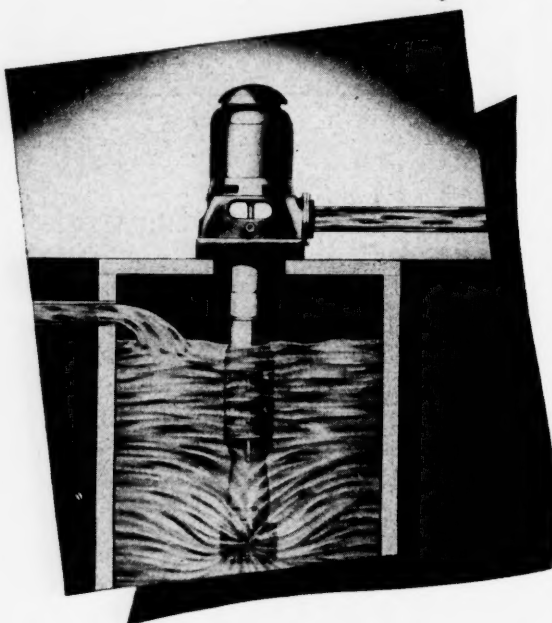
Best time ..... A.M. .... P.M. ....

Name .....

Address .....

City ..... State .....

**PEERLESS  
VERTICAL  
CLOSE-COUPLED  
TURBINE PUMPS**



**FULL TURBINE PUMP  
UTILITY & CAPACITY**

***from Short or  
Medium Settings***

Peerless Vertical, Close-Coupled Turbine Pumps offer a most efficient method of supplying and moving water from short settings. Ideal for installation over sumps, pits, basins, etc., where turbine pump utility and capacity are required. Capacities: From 15 to 30,000 G.P.M. For medium and high heads • Oil or water lubrication • Choice of Drives.

Request Bulletin B-159, describing the engineering, construction and application of Peerless Vertical Close-Coupled Turbine Pumps.

**PEERLESS VERTICAL, CLOSE-COUPLED PUMP APPLICATIONS INCLUDE:** BOOSTING • RECIRCULATION • RESERVOIR PUMPING • SETTLING AND CLARIFICATION AIR CONDITIONING • CHEMICAL PROCESSING • WATER COOLING • MINE DEWATERING • COOLING TOWER

**PEERLESS PUMP DIVISION**

Food Machinery Corporation

Canton 6, Ohio • Quincy, Illinois • Los Angeles 31, California

*Distributors in all Principal Cities*

(Continued from page 16)

However, if the same rate of occupancy held today, there would be a four dollar loss on each \$100.00 of net sales."

A year ago Washington's prying planners saw serious unemployment lurking just around the corner. It has taken a whole year to fulfill their prophecy. Unemployment, for them, is serious. It started knocking on their own front doors on November 5th.

Efforts have been made in recent years to overcome the stigma formerly attached to accepting public aid by applying less opprobrious terminology to destitute persons. Indigents or paupers are now known as welfare recipients or clients. In welfare circles it is believed that this new viewpoint is necessary to maintain the morale and self-respect of the unfortunate. We think it has also helped to foster the attitude that public assistance is a right of citizenship, and to discourage individual and family responsibility.

Five million pounds of insecticides have been shipped this year into the peanut belt of Georgia, Florida, Alabama, Texas, Virginia and North Carolina to save this valuable leguminous crop from the "peanut worms." National consumption of peanuts has jumped from 4.5 pounds per capita prewar to 6.5 pounds today—with a 400 per cent increase in value, from \$35 million in 1939 to an estimated \$175 million in 1946.

The following paragraphs are direct quotations from a press release of The CPA under the date of November 7th:

"A suspension order issued by CPA's Compliance Division against the Rosemore Building Co., of 1530 Chestnut St., Philadelphia, says the company was authorized on February 1 by the Federal Housing Administration to erect 88 single housing units in Willow Grove Highlands, Willow Grove, Pa. The company began and carried on construction of 36 houses in Willow Grove Highlands, the suspension order says, but in spite of repeated warnings, failed to set up placards in front on each house, with the exception of three houses upon which were posted incomplete placards which did not show the maximum sales price or rents and the project serial number.

"The company's failure to set up the required placards in a conspicuous location in front of each building to be left there until completion of the building and for 30 days afterward, unless all the accommodations in the building have been sold or rented to veterans, constituted a wilful violation of CPA's Priorities Regulation 33, the suspension order said."

These paragraphs have tempted us to coin an alternative slogan:

If better bungalows are built, bureaucrats will bungle 'em.

An editorial, bearing the caption, "Not So Strange" in the *New York World-Telegram* of September 18 reads as follows:

(Continued on page 22)

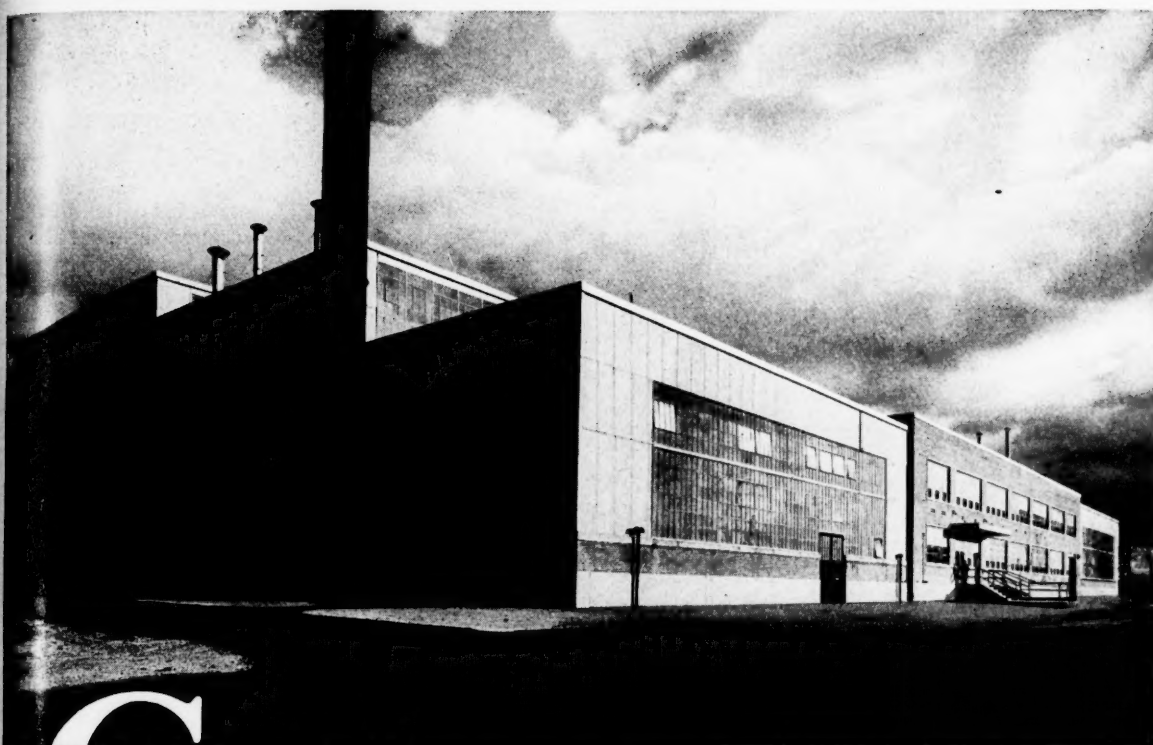
Under progressive leadership, Scripto, Inc., is translating post-war plans into action . . . working toward further development of domestic and overseas business . . . constantly creating new products. With recently enlarged plant geared to all-out production, Scripto looks ahead to even greater success in meeting the demand for popular-priced, high-quality writing instruments.

**TWO WALL STREET, NEW YORK N. Y.**



STO

VECE

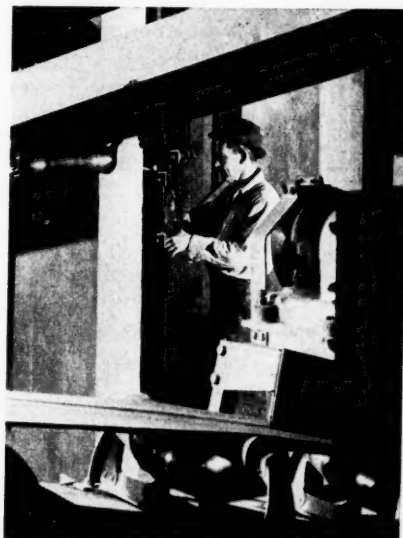


# GIVING DUST THE BRUSH-OFF

Result: . . . better working conditions

Heat and dust from top charging furnaces are drawn off at source, instead of being disseminated throughout the steel foundry of the Chapman Valve Manufacturing Company at Indian Orchard, Massachusetts.

The complete plant . . . offices, health clinic, laboratory and production facilities . . . was designed and built by Stone & Webster Engineering Corporation in 11 months from date of authorization.



STONE & WEBSTER ENGINEERING CORPORATION

A SUBSIDIARY OF STONE & WEBSTER, INC.

## KEEP IT UNDER COVER!



Come rain, snow, freeze or blow, your goods stay safe and dry under weather proofed Fulton tarps. Stacked on the loading dock, loaded on trucks, waiting on the wharf—wherever your shipments go, Fulton protection is easy to take along. You'll save the price of tough, all-weather Fulton tarps over and over by cutting down weather damage on shipments in transit and for general use around the plant.

Fulton's rope holes are triple reinforced, lined with rust-proof metal grommets... the strong, tightly woven canvas is permanently "pressure impregnated" with Fulton's exclusive weather and mildew treatment.

Fulton tarps come in standard sizes—a size for every use, a thousand uses for every size. Near you there's a Fulton dealer who will be glad to serve you. Call him today.

### FULTON BAG & COTTON MILLS

Manufactured Since 1870

New Orleans    St. Louis    Dallas    Kansas City, Kans.  
Denver    Atlanta    Minneapolis    New York

(Continued from page 18)

"The Gallup Poll reports that 51 per cent of this country's voters can't tell the meaning of the phrase, balancing the federal budget.

"Maybe that's not so strange.

"Not for 16 years has anybody in this country seen a balanced federal budget.

"Few citizens now below the age of 35 or so were taking any interest in the subject when the federal budget was last balanced.

"Millions of voters can remember budget balancing only as an annual promise, not as an annual performance. And, for quite a while, it ceased to be even a promise. New Deal economists told us that, after all, unbalanced budgets needn't cause worry, and the quaint idea that the government should live within its income went out of fashion as well as out of practice.

"No, it's not strange if more than half of the voters don't know what balancing the federal budget means."

In the 13 months that have passed since V-J Day, employment in the executive branch has dropped from 3,649,769 to 2,480,959, a reduction of 1,168,810. Yet during this time, the War and Navy Departments have reduced employment 1,400,748. This means simply that in the other agencies of the government an increase of 231,938 has taken place in the past year. Moreover, 12 of the 19 emergency war agencies in existence on V-J Day have either been liquidated or transferred. Consequently, when one reads of reductions in Federal employment, let it be understood that these—up to the present time—have been almost wholly in the War Department, the Navy Department, and certain emergency war agencies—notably the Office of Censorship, which as far as can be ascertained is the only war agency of which no vestige remains.

"The only way to look at a dollar is that it is a ticket for goods.

"If the goods are not produced, or are destroyed, or are produced more slowly than the dollar tickets are printed by the government, or issued in pay checks, the dollar loses value.

"Higher wages, or more tickets—simply cannot raise the scale of living of the American people unless more goods are produced to put behind the dollars.

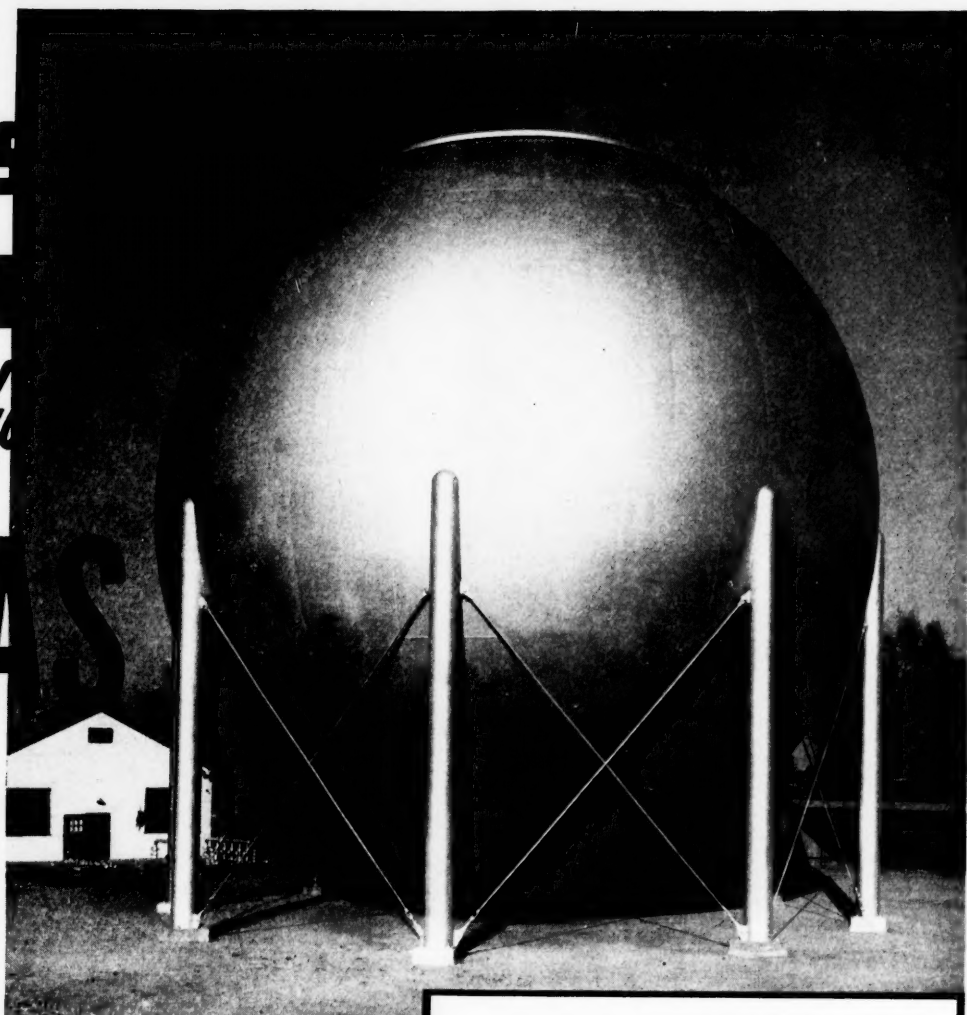
"Higher dollar-wages cannot even prevent a serious decline in the scale of living. You can't eat dollars."

*E. F. Dutton in The New York Herald-Tribune*

Railroads are loading nine per cent more cars weekly than a year ago but have 16,000 to 17,000 fewer cars to do the job. Many delayed rail deliveries are in prospect, particularly if winter is severe. Class 1 roads have 61,419 new freight cars on order. But so many cars have been worn out or laid up for repairs because of war traffic that the roads do not anticipate much relief from this source. With less cars in service today than a year ago, with demand greater, with little prospect of relief through new cars, with many industries bottlenecked for rail shipment, prospects for improvement in rail transportation in the next 12 months are exceedingly dim.



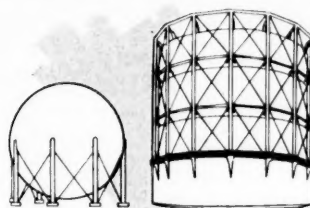
# PRESSURE STORAGE for GAS



*... has many advantages*

PRESSURE STORAGE, as provided by the Hortonsphere, is a logical method of storing gas in distribution systems. The Hortonsphere supplies high pressure gas in the system at the pressure desired. It has no operating parts, requires little attention, and is easy to maintain. It has a minimum of surface to cover at repainting time and is pleasing in appearance.

Hortonspheres for gas storage are built in standard sizes from 22 $\frac{1}{4}$  ft. to 65 ft. in diam. for operating pressures of 30 to 150 lbs. per sq. in. The Hortonsphere shown above is 60 ft. in diam.



## HORTONSHERE vs. LIFT TYPE HOLDER

A 60-ft. diam. Hortonsphere operating at a maximum of 75 lbs. per sq. in. will release 545,000 cu. ft. of gas. A standard lift-type holder with a capacity of 500,000 cu. ft. is approximately 98 ft. in diam. by 106 ft. high.

## CHICAGO BRIDGE & IRON COMPANY

Atlanta 3 .....2145 Healey Building  
Birmingham 1 .....1530 North Fiftieth Street  
Houston 1 .....5614 Clinton Drive  
Tulsa 3 .....1611 Hunt Building  
New York 6 .....3313-165 Broadway Building  
Cleveland 15 .....2216 Guildhall Building

Chicago 4 .....2106 McCormick Building  
San Francisco 11 .....1240-22 Battery St. Building  
Philadelphia 3 .....1619-1700 Walnut St. Building  
Los Angeles 14 .....1417 Wm. Fox Building  
Washington 4 .....703 Atlantic Building  
Detroit 26 .....1510 Lafayette Building

Plants in BIRMINGHAM, CHICAGO and GREENVILLE, PENNSYLVANIA

# ACCURATE



# FABRICATION

*depends on 3 things:*

## 1 Planning

Accurate specifications and careful detailing are the first part of any job. We maintain a highly competent staff of engineers for that purpose.

## 2 Workmanship

We employ a force of skilled workmen who have had long experience with steel and in handling the tools of the trade.

## 3 Equipment

In the clean, clear, well lighted shops are all of the most modern machines and tools—and the space in which to use them to best advantage.

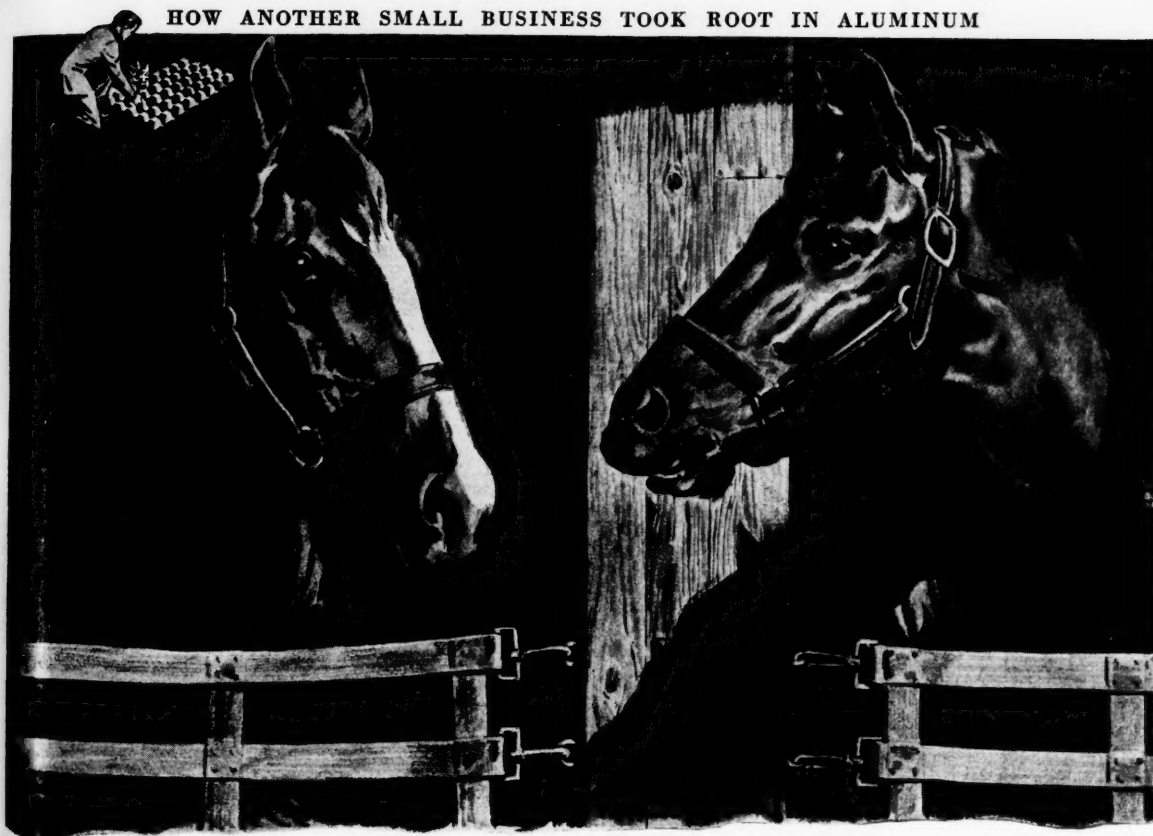


## SOUTHERN STEEL WORKS

KIRKMAN O'NEAL, President

Offices: 745 NORTH 41st STREET, BIRMINGHAM, ALABAMA

# HOW ANOTHER SMALL BUSINESS TOOK ROOT IN ALUMINUM



## Did I tell you about my new shoes?



*"They're made of aluminum... just like the shoes Assault wore in winning the Kentucky Derby, Preakness, and Belmont Stakes. Wait till I go to the post again!"*

... So goes the gossip among race horses today.

This new style in horseshoes dates back to 1928 when Mr. Leonard Leipman, president of The Victory Racing Plate Company, Baltimore, Maryland, sparked the idea of aluminum racing plates... figuring that even a horse needed to save horsepower. He was a true "imagineer"... with good "horse sense". Fine steel shoes had been made for years. But to make them of aluminum, that was different.

What alloy would make the best shoe? What temper? Could it be forged? Would the weight saved be worth-while? These questions needed answering.

Alcoa engineers were called in and supplied the perfect alloy for the job. It was light (one-third the weight of iron), strong, durable, easily forged. Made an excellent horseshoe.

The Victory Racing Plate Company has made over a million aluminum horseshoes, without a single report of failure of their shoes in actual use. They're being worn by the leading thoroughbreds of the nation... reason enough for the gossip among race horses today.

This is another example of how hundreds of businesses, large and small, have been helped by Alcoa's 58 years of experience working with the makers of all kinds of aluminum products.

Maybe you have a product that should be aluminum. Maybe we can help you make it better at lower cost. ALUMINUM COMPANY OF AMERICA, 2109 Gulf Building, Pittsburgh 19, Pennsylvania. Sales offices in principal cities.

# ALCOA

FIRST IN ALUMINUM







## Ask EL DORADO, ARK. About Layne Water Systems

El Dorado, fabulous oil city of Arkansas—alive, growing and becoming a greater and greater industrial center, knows, likes and depends exclusively on Layne Well Water Systems. The City, Oil Refineries, Railroads, Power & Light Services and various Petroleum Industries—all—100 per cent, have Layne Well Water Systems. Such a record means that the name Layne, stands for high efficiency, longer life, superior quality and proven operation economy.

Layne high efficiency Well Water Systems are world famous in advanced engineering features—world proven in lasting quality and the lowest of all in operation cost. Each unit is specifically designed, manufactured and installed to fulfill your exact requirements.

If your city, industry, railroad, air conditioning or irrigation project is in need of more water at greater economy, write for late catalogs, bulletins, etc. Address Layne & Bowler, Inc., General Offices, Memphis 8, Tenn.

### HIGHEST EFFICIENCY

*Layne Vertical Turbine Pumps are available in sizes to produce from 40 to 16,000 gallons of water per minute. High efficiency saves on power cost.*

**AFFILIATED COMPANIES:** Layne-Arkansas Co., Stuttgart, Ark. \* Layne-Atlantic Co., Norfolk, Va. \* Layne-Central Co., Memphis, Tenn. \* Layne-Northern Co., Mishawaka, Ind. \* Layne-Louisiana Co., Lake Charles, La. \* Louisiana Well Co., Monroe, La. \* Layne-New York Co., New York City \* Layne-Northwest Co., Milwaukee, Wis. \* Layne-Ohio Co., Columbus, Ohio \* Layne-Pacific, Inc., Seattle, Wash. \* Layne-Texas Co., Houston, Texas \* Layne-Western Co., Kansas City, Mo. \* Layne-Western Co. of Minnesota, Minneapolis, Minn. \* International Water Supply Ltd., London, Ontario, Canada \* Layne-Hispano Americana, S. A., Mexico, D. F.



## WELL WATER SYSTEMS VERTICAL TURBINE PUMPS

## Research Creates New Products from Oil and Gas

The effectiveness of research in the South and the promise it holds out for future advancement was the theme of speakers at the annual meeting of Southern Research Institute in Birmingham on November 26.

In an address by Robert P. Russell, president of Standard Oil Development Company, special emphasis was placed on the partnership which exists between research and the petroleum industry. The address revealed that the number of new, every day materials that can be, and are being made from petroleum and natural gas staggers the imagination.

Among the new products mentioned were soaps of superior quality, a new resin that is producible in thin sheets such as can be wrapped around perishable food products, and highly effective fungicides and insecticides; also a synthetic gasoline from natural gas that looms as a competitor of the orthodox type of motor fuel.

The synthetic soaps producible from petroleum products are said to have remarkable properties, leading to predictions that the next few years will see substantial proportions of all soaps made from oil or gas.

The new-type resin with its extraordinary moisture-proof qualities is especially adaptable in the South, prolific producer that that region is of those products that are among the most nourishing and enjoyable foods of man, and at the same time the most perishable. The resin wrappers are about five times as moisture-resistant as other types of wrappings that have been commonly used in the past. They should enable fruits and vegetables to be stored much longer than heretofore, and to permit of more distant shipment with little or no refrigeration.

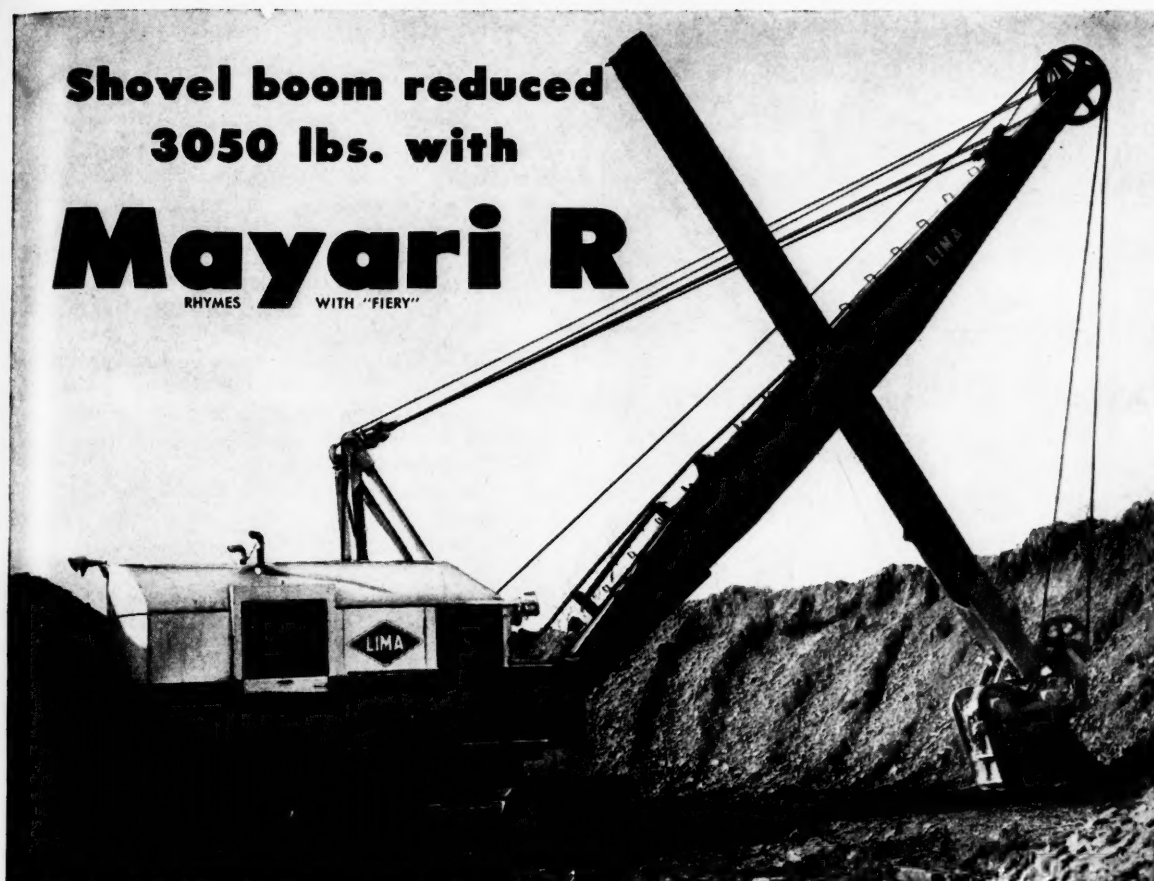
In addition to the effectiveness of insecticides and fungicides being produced from petroleum, it is held that they can be produced at considerably lower cost. One of these products is now being tested in large-scale field trials. It is said to have the potency of nicotine, with even greater staying power than nicotine, and costs only a fraction as much to produce. If it fulfills its hoped for promise, the new discovery will likely be hailed by Southern farmers as the answer to one of their most pressing needs.

It was also developed in the discussions that the combination of coal and petroleum reserves offer an almost inexhaustible supply of fuel potentials for the future, so far as motor power is concerned. This promise, combined with progress already made in wood products and other sources of alcohol does much to dispel any fears that mankind may lack power fuel within the span of the next thousand years. By that time things now unimaginable may have been brought about in the development of atomic energy for fuel.

These developments are all the results of research, which converts coal into gasoline, gasoline into soap and numerous other commodities, and very likely in time will convert these same commodities into others as need for them develops. The South with its expanding economy can and does rely on such research to perpetuate the progress that has resulted in such a sharp rise in its per capita income in recent years.

# Shovel boom reduced 3050 lbs. with **Mayari R**

RHYMES WITH "FIERY"



Lima shovel, Type 1201, with air-control. The 42-ft. boom is built principally of Mayari R

The 42-ft. boom of this Lima shovel weighs 12,200 lbs. The channels, side plates, top and bottom of the boom are made of Mayari R high-strength steel. This construction reduced the deadweight an estimated 20 per cent, or approximately 3050 lbs. Another example of worthwhile weight savings effected by the use of Mayari R in earth-moving and heavy construction equipment.

Mayari R's tensile strength of 70,000 psi and minimum yield point of 50,000 psi permit its use in lighter shapes and gages. This means substantial deadweight reduction in the finished equipment without sacrificing strength. Or, if greater than normal strength is required, Mayari

R supplies it without increasing the overall weight.

This modern low-alloy, high strength steel resists corrosion, abrasion and shock. Low-cost maintenance and long life are assured. It forms and welds similarly to carbon steel, without requiring heat-treatment. Fabricating costs are approximately the same.

Consider the savings Mayari R could bring about in your own product or equipment. The new Mayari R catalog is just off the press. Write for it today.

**BETHLEHEM STEEL COMPANY**  
BETHLEHEM, PA.

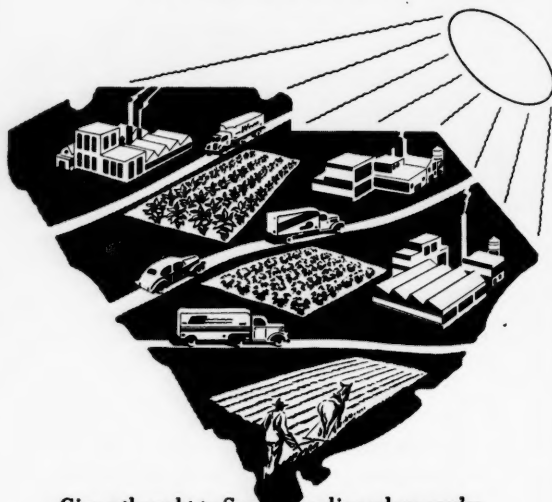
On the Pacific Coast Bethlehem products  
are sold by  
Bethlehem Pacific Coast Steel Corporation



**Mayari R** *makes it lighter...stronger...longer lasting*



## OUR BEST "CROPS" KEEP RIGHT ON GROWING!



Give a thought to South Carolina when you're digging out from under the snow! Down here the winter sun grows more than vegetables . . . it produces also pleasant living and working conditions, dependable transportation on ice-free highways, low absenteeism and low plant operating costs. Yet, with so many "out-of-this-world" advantages, South Carolina is very much *in* your world . . . quickly accessible to both markets and resources. Now for facts! Tell us your business, and we'll turn the state upside down to obtain accurate, up-to-date information for you! Write State Research, Planning & Development Board, Dept. E, Columbia, S. C.



## Rural Roads are Farmers' Lifelines

The farm population of the South, and in fact that of the entire nation, is increasing for the first time since 1932. This occurrence is inducing the citizenry of Southern states to give attention to the need for more and better roads.

Travel for the farm population climbed to an all-time peak in September, this year, exceeding the previous record in September 1941 by 2.7 per cent. Even in the face of automobile shortages, motor vehicle registrations in the South in 1945 numbered slightly under seven million, and motor fuel consumption for that year jumped to 9,718,938,000 gallons from the 5,785,689,000 gallons used in 1944.

Farmers are the largest single group of motor vehicle owners. Throughout the nation, more than four million passenger cars are in the use of the farm population. Furthermore farmers own 1,110,000 trucks and, in addition, hire the service of another half million to handle farm products and supplies. Thirty-four per cent of all trucks in use are in the service of agriculture.

It is natural therefore that in the record month of September 1946, rural roads of the nation should have carried 4,661 million vehicle miles of travel as compared with 11,608 million miles on state highways. Since most of the farmer's driving is connected with his work, with 67 out of every 100 miles he drives being for the purpose of pursuing a livelihood, 78 per cent of his travel can be classed as essential. Improvement and extension of rural roads therefore becomes a matter of prime importance.

Of the roads presently available to farmers for their main purposes somewhat over one half are unsurfaced dirt roads, impassable over certain seasons of the year. Yet, on these roads farmers must depend for mail service, pupil transportation to and from schools, and the normal traffic necessary to agricultural activity.

Moreover, the farmer's road to city or town is the supply line for urban sustenance and wellbeing. Over these go the nation's supplies of food and other essentials. Well built and properly maintained rural roads, accessible to every farm, and connecting with main highways, will not only do much to encourage the growing migration back to farms poorly supplied with essential farm labor, but will be of distinct benefit to the country's entire population, dependent as it is on farm production and transportation.

Rural roads are lifelines in the true sense of the word.

Time was when many states were hard put to collect enough tax revenue to sustain state government expenses. Bond issues were many and heavy. Federal aid was sought for many purposes — and was usually granted. Now the shoe is on the other foot. By 1945, aggregate state tax collections had grown to \$4.3 billion as compared with \$3.3 billion for 1940; this has happened despite lower gasoline revenues due to rationing and excluding collections for unemployment compensation.

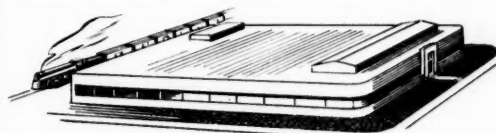




Lots of sunlight and fresh air—plenty of room for growing children or *growing factories*.

A mild, healthful climate that adds enjoyment to all outdoor activities . . . and permits uninterrupted year-round production—savings in plant construction and fuel costs. Here are the raw materials of empire . . . mineral, forest, agricultural. A plentiful labor supply, especially in Georgia's excellent small towns. Abundant good, soft water. Splendid transportation facilities. Electric power at rates among the nation's lowest. A sound tax structure. A modern educational system. Recreational facilities from the mountains to the seashore. Yes, it's *Great* to be a Georgian . . . to live and work among a friendly people—away from the problems of congested areas, but with easy access to rich and growing markets.

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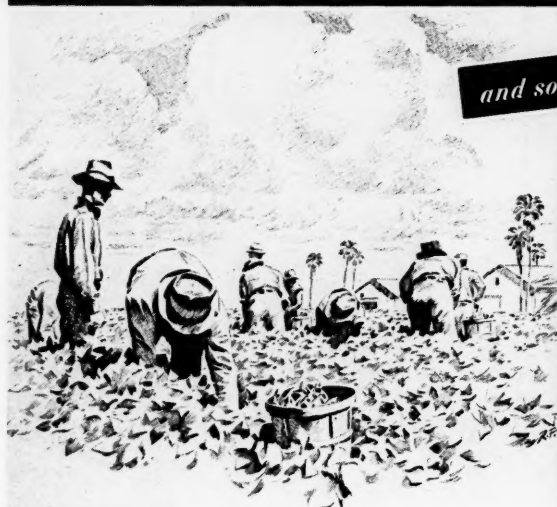


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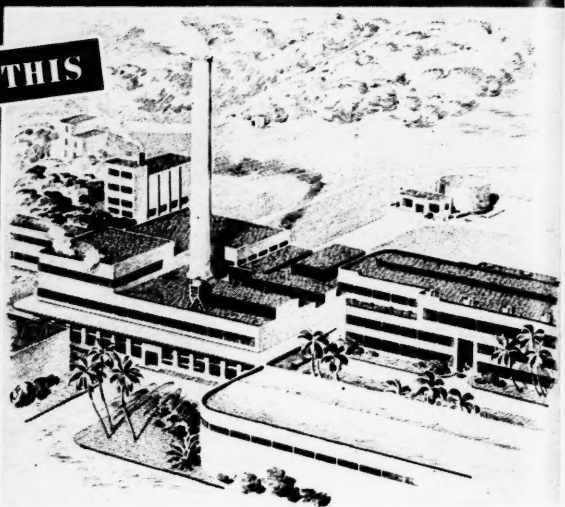
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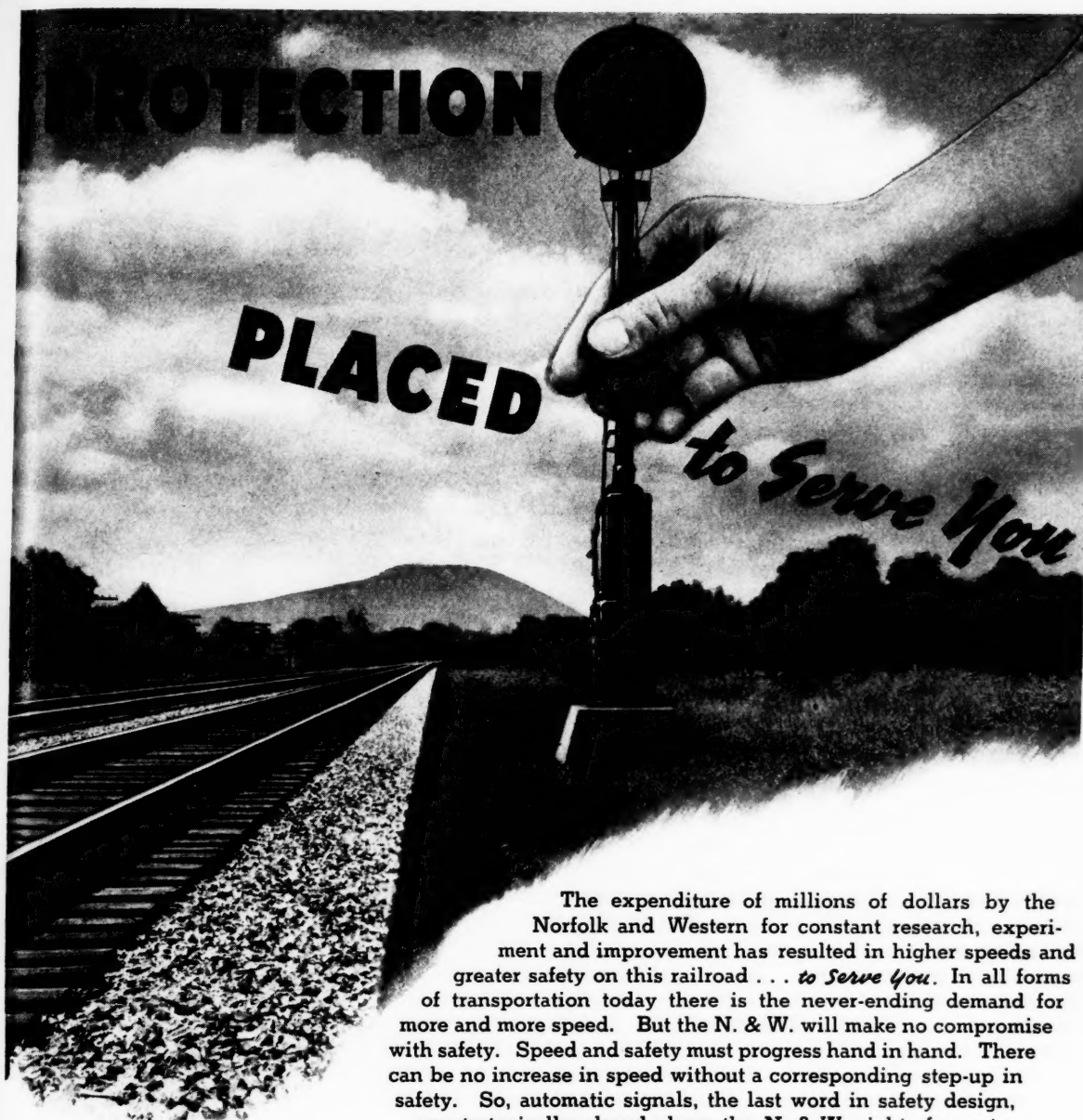
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WHAT ENRICHES THE SOUTH ENRICHES THE NATION

# A KNOCK-OUT/



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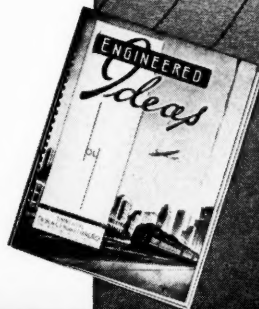
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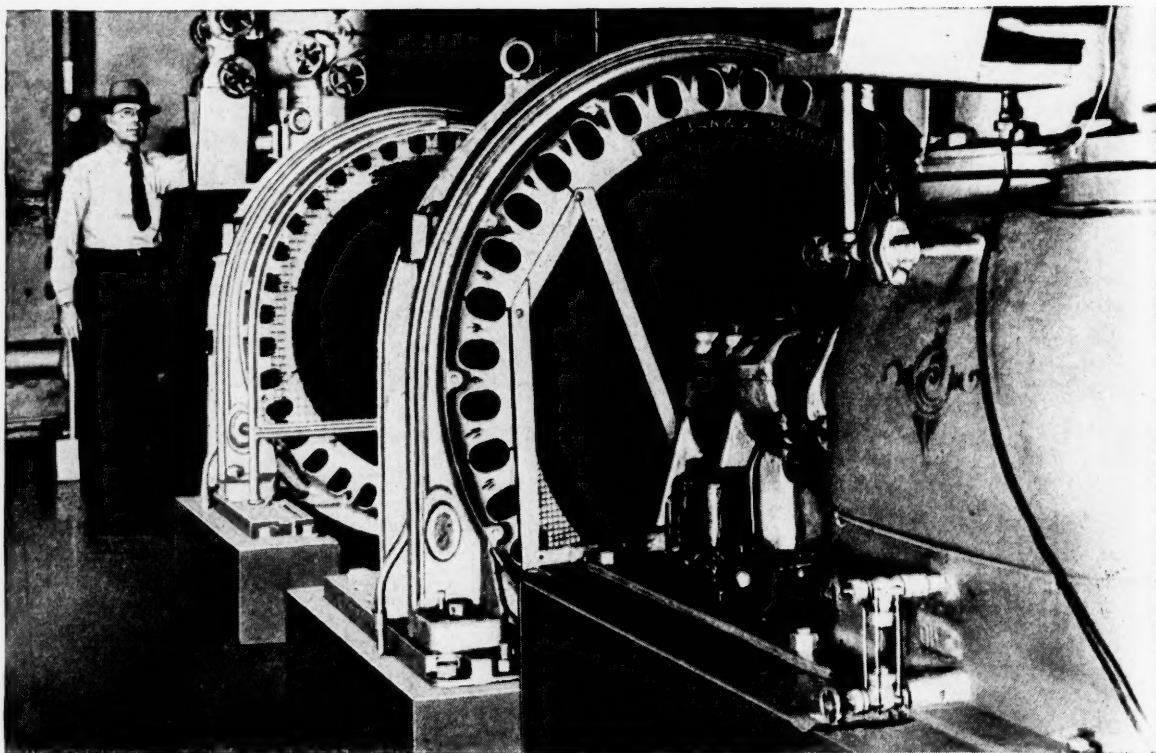
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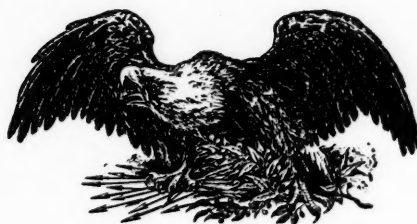
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*"What Enriches the South Enriches the Nation"*

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## **"UNREASONABLE"**

According to Section 102 of the Revenue Act corporate income tax returns for 1946 will require a corporation to state whether at least seventy per cent of its net income has been distributed in the form of dividends to its stockholders. If it was not, then the corporation must explain the reasons why. If these reasons are not "reasonable," a penalty tax of twenty-seven and a half per cent is levied on the first hundred thousand dollars so retained and one of thirty-eight and a half per cent on all over that amount.

Just what retention of profits is "reasonable" undoubtedly will vary depending upon differing points of view. It is more than conceivable—it is inevitable—that the owners of a business who are properly concerned with conserving that business's assets and with those assets building for the future will consider as "reasonable" their reasons for retention of profits beyond the thirty per cent limit set by law. It is just as equally conceivable and inevitable that federal tax examiners, representatives of the Treasury Department, who are interested primarily in collecting revenue, will deem such withheld profits "unreasonable."

But the difficulty of the interpretation of this law in individual cases and the limitless confusion and potential bias that its application will produce, while bad enough in itself, applies only to the mechanics of administration. The basic evil lies in the underlying motive that may have inspired the law and the effect that it will have on everybody's business in our free enterprise system.

The ostensible and publicized reason for including this surtax in the Revenue Act was to increase income tax collections by increasing personal incomes

through dividends. It was undoubtedly passed by a shortsighted or careless Congress striving to attain that end. But what were the concealed purposes (if any) of its sponsors and real protagonists? Were they attempting to accomplish an entirely different objective by subterfuge? Were they taking a leaf out of the book of political tactics of Senator Wagner and his even more illustrious leader? Were they advocating in the name of needed tax receipts a law that gradually would dry up the fountains of private property and destroy it by attrition?

This section of the Revenue Act has much in common with other malconceived legislation passed during the late unlamented political era of chicanery and intellectual dishonesty. Such bills were introduced (and alas many of them were enacted into laws) for an asserted altruistic purpose while their true objective was cunningly concealed from a gullible public. Many senators and representatives, accustomed to dealing with honorable men, were honest enough not to be alertly suspicious of the crooked thinking of some of their associates.

Let us hope that legislation by legerdemain is a practice that has been discarded by the Congressional successors of the "public is too damned dumb" era. Let us hope that such communistic tactics have become as unpopular in legislative halls as communism has become in the popular mind. Let us hope that our representatives have the moral integrity and a sufficiently high opinion of American intelligence to think straight and talk straight. Let us hope that Congress will address its immediate attention to the correction of a law which, if enforced, will result in the destruction of private enterprise within a generation.

## Engineering a Profession

Recently reported efforts of labor unions to organize engineering personnel have served to focus attention in many quarters more sharply than ever on the question of the wisdom of union leadership.

There is very little in common between the pursuits and aspirations of the engineering profession and those of the labor rank and file. In fact they appear to be so far apart in some relationships as to be actually in conflict. What labor could hope to expect, and to even less degree, what the engineers could expect to gain from such an alignment is far from clear.

In one sense it is readily apparent that the unions would be distinct losers. For many years they have been feeding on manna that was none of their making, actually that of the engineers. Unions have consistently laid claim to gains in productivity in which they had little or no part, such gains being solely the result of scientific and engineering accomplishment.

Output per working man, and output per manhour of effort, have unquestionably improved during the past half century to a phenomenal extent—yet labor leaders would be hard put to show that any one of their followers is performing today at a superior, or even equal, physical rate, compared to his nineteenth century predecessor.

Thus far labor has been able, or at least has assumed, to take credit for advancement which belongs to it only ostensibly. Negligible protest has been raised against these claims. The scientist and engineer, the real creators of the gains, content in the knowledge that their work has been done, and well done, have raised no voice in the matter. Whether the engineer, if relegated to an equal footing with manual workers, would continue to maintain this attitude is highly questionable. Viewed from this angle the organizing project looks like an absurd instance of another slaughter of the golden goose.

If the unions undertaking the scheme have any clearly defined purpose at all, aside from a recently exhibited proclivity to organize anything and everything that meets the eye, the only logical direction in which to look for it is in the political field. Without assuming to delve into the sometimes inscrutable elements of union strategy, a cursory assumption might be based upon the fact that claims to gains in productivity seem scheduled to assume a greatly increased role in future negotiation of wage contracts.

Capital interests are becoming more and more insistent that demands for wage increases must be accompanied by proof of increased productivity. Recent conferences in the nation's capital between heads of manufacturing capital and labor organizations to determine standards for measuring productivity are reported to have broken down because neither was willing to recognize the other's claims with respect to the matter. It is possible that union strategists believe that incorporation of engineers within the ranks of labor would definitely clinch the claims upon which they desire such standards to be based.

From the standpoint of the engineers themselves, their cooperation in the enterprise would appear even more incongruous than the hopes and expectations of the unions. While as a profession the engineers may not have been accorded the complete recognition to which they are entitled, they do stand high in the esteem of the nation. Their status ranks head and shoulders above any they could ever hope to attain through union alliance. Loss or diminution of that esteem would be a great loss. Furthermore, as they are, they are independent. They, along with their near associates, the scientists, are probably freer than any other elements of the national economy from pressure group constriction. With their professional organizations in the background, as a rear guard and for guidance, they are individually free to work out their own destinies. As they are, they represent one of the few remaining vestiges of true free enterprise, still able to avail themselves of its recognized advantages.

For some years to come the welfare of the entire nation is going to be vitally dependent upon engineering ingenuity. With wages and prices running what appears to be a death race, technological reduction of production costs contains the chief hope of breaking the deadlock, and putting an end to the inflationary cycle. It seems inconceivable that the engineering profession could fulfill this function should its traditionally high-motivated performance become diluted by the union philosophy of more pay for less production. The two concepts are fundamentally inimical.

It is not clearly known how far the movement has gone toward organizing the engineers, nor what success it has met in initial efforts. The matter was very recently subject for serious discussion by members of The American Society of Mechanical Engineers, at a meeting in New York sponsored by the metropolitan section of the society. It is obvious from some of the utterances at that event that some of the more settled members of the profession are concerned. They see a chance for youthful and impulsive segments of the profession to be swept with the tide. The consensus of opinion at the meeting was, however, that while the younger members were showing a desire for some kind of organization to turn to, it was not the union kind, and that steps would be taken aggressively to rebuild established professional societies into groups that could be more than mere social assemblages.

There are signs too that the American public is being awakened to the true significance of engineering as related to American standards of living, and to the essential part the engineer has played in the overall accomplishment of those standards. The scientist, at least since the inception of atomic discoveries, has been elevated to his rightful sphere in public esteem, and is being accorded the recognition that is due him. The engineer, who applies that which the scientist discovers, is well on the way to similar recognition.

It is highly probable that the saner heads in the profession will be able to curb any dangerous inclinations towards unwise organization to which their less experienced associates may tend.

# STALIN'S UTOPIA

by  
Lawrence Sullivan

COMMUNISM celebrated its twenty-ninth anniversary in Russia last November. What does the balance sheet show for the bloody business of 1917 which was to launch "a wonderful new life" for 170,000,000 people inhabiting one-sixth of the earth's surface?

Victor Kravchenko, born in a remote village of the Ukraine in 1905, was a lad of 12 when the Communists took over. Son of a revolutionary father who had been imprisoned for resisting Tsardom, Victor soon was a Comsomol, in official training for future membership in the Communist Party.

"I must never forget that I am a Comsomol first, a person second," he wrote of his boyhood. "We were always aware that from our midst must come the Lenins and the Bukharins of tomorrow. We were perfecting ourselves for the vocation of leadership; we were acolytes of a sort of materialistic religion."

He worked in the coal mines, attended an official school in collectivist agriculture, did a turn in the Red Army border patrols, was selected for training in the engineering institute, and advanced in 1933 to director of the pipe mill in the Nikopol metal monopoly. In August 1943 he was assigned to Washington as a member of the Soviet Purchasing Mission. His instructions in diplomatic protocol went so far as to indicate the newspapers and magazines to be read in America. "The only way to play safe was to read the *Daily Worker*, the Russian language paper *Russky Golos*, the New York tabloid *PM*, and the pro-Soviet weeklies like *The Nation* and *The New Republic*."

On April 2, 1944, Kravchenko fled in the night from his Washington residence, announced his resignation from the Russian Government in a letter to the *New York Times*, and disappeared from public view. Afforded safe haven in the U. S., he eluded Stalin's gunmen for two years. In February 1946 his book was published by Charles Scribner's Sons, New York.

The title is *I Chose Freedom*—500 pages of life behind the Iron Curtain between 1917 and 1943, when the dreaded secret police,

N.K.V.D., "consolidated" the revolution in a manner which gave the world a new term in the lexicon of political philosophy, "the Police State."

This book is one of the most remarkable human documents of our time. A history of the Kremlin from the inside, it illuminates the whole horizon of war and peace for an entire generation. Equally important for the future, it is the first evidence to date that a youngster subjected to the rigid indoctrination of a completely regimented environment from a tender age, still may emerge

**VICTOR KRAVCHENKO  
QUIT MOSCOW'S INNER  
CIRCLE TO GIVE THE  
WORLD A FIRST-HAND  
ACCOUNT OF COMMUNISM  
IN ACTION.**

in maturity with the inherent instincts of freedom, human feeling and aspiration for a life of dignity and honor. If you want to know what state-ism does to the human spirit, the incentives to progress and the social patterns of ordered liberty under law, give yourself an evening of famines, purges, concentration camps and N.K.V.D. blood baths in the diary chronicles of *I Chose Freedom*.

During his first month as director at Nikopol, where 1,500 workers were under his immediate supervision, Kravchenko discovered that his secretary, his chauffeur and his housemaid were on the secret rolls of the N.K.V.D., watching and reporting hourly not only upon his official conduct in the plant, but every move of his private life—his guests at home, his habits and tastes in reading, his favorite radio programs, his telephone conversations.

"Such was the atmosphere in which we worked from the start. The

older engineers and administrative officials regarded it as the natural climate of Soviet industry. . . . Within a year Nikopol seemed not so much an industrial establishment as a hunting ground for the police and their secret informers."

When he needed a new clerical assistant, Director Kravchenko sent a routine requisition to the Personnel Department. Next day they sent in a fellow who recently had been released from a four-year term in Siberia.

"Even under our Soviet conditions he was an extreme specimen of squalor. When I told the dilapidated ex-prisoner that he could show up for work in a day or two, he smiled for the first time. I gave him money in advance and instructed the plant store to give him essential clothes."

Several weeks later the new clerk fled mysteriously. His parting note to his plant chief said: "I am trying to escape this land of horror. Even death will be better than life as a slave. . . . If God is with me, I shall cross the frontier. If I'm caught, I'll be shot, of course. . . . I hate the Soviet regime and its police with a deadly hate."

With the letter he enclosed for the director a list of all the N.K.V.D. operatives in the Nikopol plant. He had obtained release from Siberia by indenturing himself for life as an N.K.V.D. spy. The official list of the secret agents in Nikopol, Kravchenko relates, "included several of my closest colleagues in the plant, foremen, plain workmen, clerks in the commissary. The network of informers was spread through every shop and office in the factory, covering all stages of the technological process."

When peasants refused to give up their grain to the Soviet export pool, Party Brigades of armed collectors were sent to the villages. During 1931, peasant resistance in the Odessa area became particularly effective, almost suicidal.

"The situation was considered so serious that Molotov himself came down, in behalf of the Politburo, to stiffen the government's ruthlessness. Comrade Molotov called the activists together and talked plain-

(Continued on page 70)



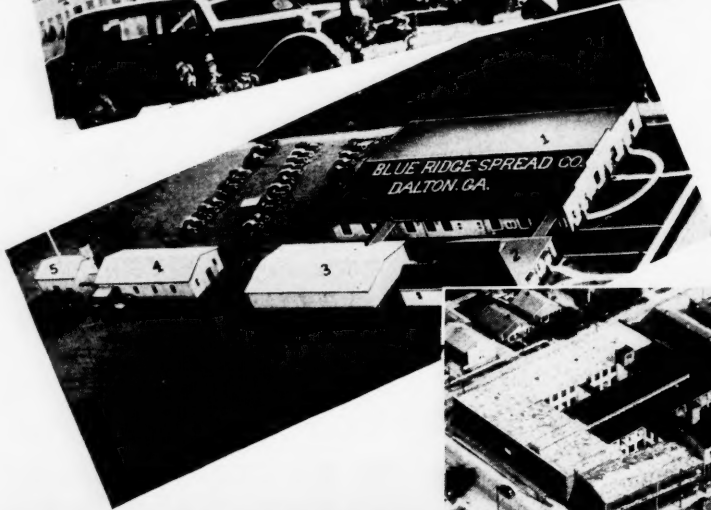


Plants along "bedspread boulevard" on this page are:

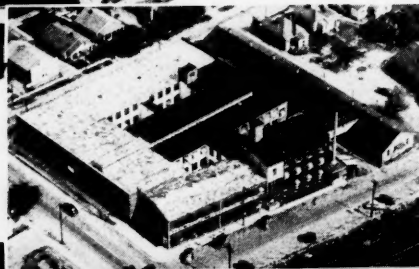
Top—Redwine and Strain, typical of the modern structures housing the South's tufted textile industry.



Left—Wintuft Corporation's plant at Ringgold, Ga.

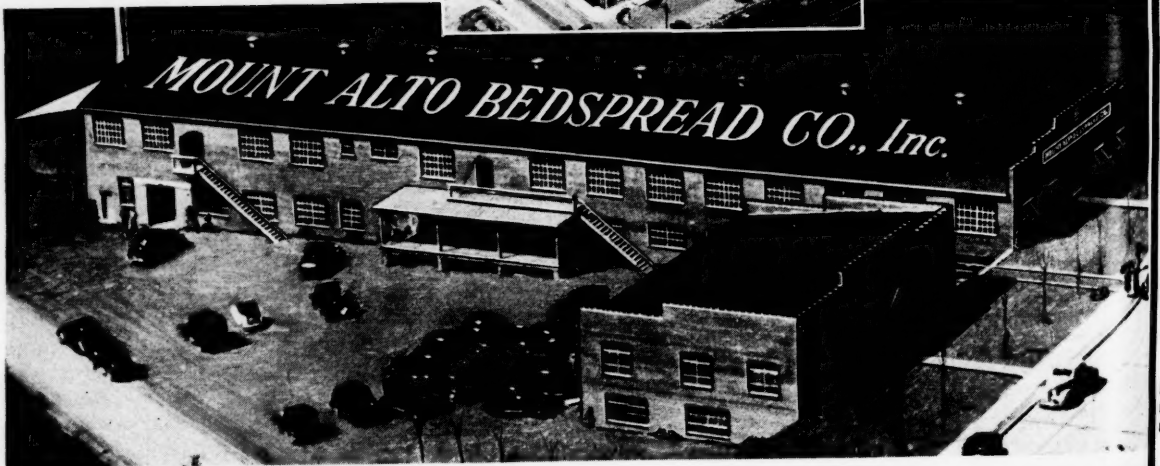


Left—middle—"Bird's eye" view of the Blue Ridge Bedspread Company at Dalton, Ga. No. 1 is general plant; 2, main office and sample rooms; 3, warehouse; 4, laundry and dye plant; 5, boiler room.



Left—lower—Cabin Crafts plant at Dalton.

Bottom—Mount Alto Bedspread Company, Inc., owned by Dr. J. H. Boston, of Calhoun, Ga.





Above—Sewing room at the Blue Ridge Spread plant, Dalton, Ga.



Above—Henry C. Ball, executive director, Tufted Textile Manufacturers Association.

## “Bedspread Boulevard”

by  
John Mebane

**B**EDSPREAD Boulevard.” That’s how the highway from Dalton, Georgia, to Chattanooga is referred to today. And all because in 1900 a Georgia farm girl named Catherine Evans sold a hand-made bedspread for two dollars and a half.

It’s a veritable rags to riches story, because Dalton today is the bedspread center of the world, and the cash jingling in folks’ pockets there can be traced in large measure back to Catherine Evans and the ingenuity and enterprise of the women who emulated her example.

It was in 1892, so the records show, that Catherine, aged 12, living with her parents on a farm near Dalton, so admired a beautiful tufted bedspread which one of her cousins had inherited that she determined to make one like it. She set to work. Three years later the spread was completed. The following year she made another as a wedding gift for her brother. Five years later, she made her first sale. Mrs. John Lee, of Trion, Georgia, bought a spread from Catherine for two dollars and a half.

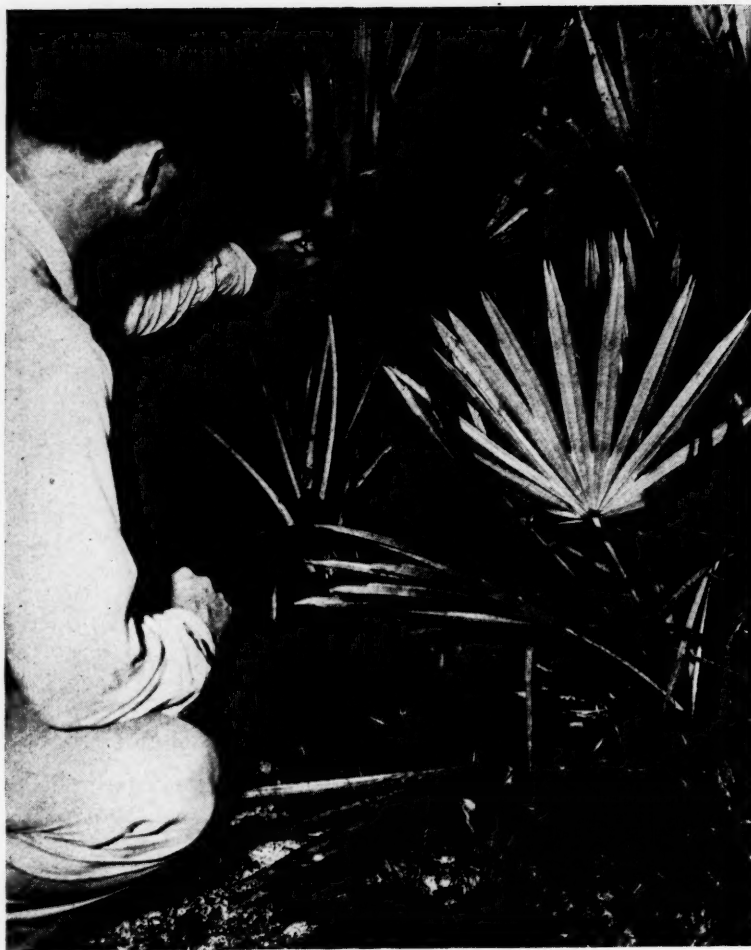
(Continued on page 78)



Right—upper—Cutting and stamping department at Mount Alto plant.

Right—lower—Many of the tufted textile manufacturing companies have their own laundries. This one is at Calhoun.





*Left—Saw palmetto, hip-high in contrast with the cabbage palmetto or palmetto, grows wild in great abundance and promises to become a source of a thriving building materials industry in Florida as the result of experiments by P. R. McCrary, of Lakeland, Fla.*

## Saw Palmetto, a new raw material

by

George Anderson

**T**HE parasitic saw or scrub palmetto, which covers an estimated 3½ million acres of Florida land, is in the economic news these days. Not long ago, a Washington, D. C., firm, the Palmetto Fiber Company, launched plans to build a \$950,000 plant near Punta Gorda, Fla., for the manufacture of heavy industrial fiber from palmetto. In the last war navy gun wads were made from this source.

But far greater economic possibilities for the saw palmetto and the cabbage palm, from which Florida manufacturers have been "cooking" whiskbroom fiber for half a century, are inherent in discoveries claimed

by P. R. McCrary, mechanical engineer of Lakeland, Fla.

Mr. McCrary reports that he has developed a mechanical process of separating the fused toughness, or aqueous fiber and cork, or pith, contents of the palmetto; that by adding powdered limestone and a chemical he can turn the cork and fiber into a building tile of stonelike strength and appearance; that he has found a means of gentling the

cabbage palm so it can be sawed more easily and used more extensively as lumber.

Mr. McCrary has applied for the necessary patents and, indeed, he has samples of the glazed finished product which are somewhat crude but are home-made and were fashioned in difficult circumstances.

In addition, he credits several valuable by-products to the tenacious saw palmetto, whose bulky root soaks up minerals and water by pencil size rootlets of average five-foot length and 150-pound tensile strength. Important among these are a heavy content of tannic acid and dye which Mr. McCrary says he has isolated by the mechanical process. Possibilities are glue and varnish which would be extracted, probably, by adding the element of heat.

The chemical products open up valuable fields of experimentation. In addition, one of the leading pharmaceutical concerns has been making a diuretic from the berries of the palmetto for years. The fact of this effective medicinal element hints at the presence of others, perhaps some vitamins, in the edible "bud," which grows up to 1½ inches in diameter and 10 inches in length.

Besides these possibilities are such products as the building materials, industrial fiber, brushes, rope, cushion fiber and a paper pulp ground from the palmetto's stems and sharp fronds. Granulated cork from the palmetto and the cabbage palm could be used in linoleum, floor composition, tile, shelving and bathroom fixtures.

In view of the tremendous demand for housing materials, the McCrary studies in that field appear to be of the greatest significance. Especially is this true because of the palm's history in relation to building.

To begin with, the members of the palmetto or palm family, including the saw palmetto, are the toughest of the tough. When other means failed, they stopped Jap bullets heading for our men in the Pacific.



They might shred, but never snap off, under artillery fire which would sever ordinary trees. In wind storms they have bent with the force, but remained standing under an impact that uprooted or splintered other trees. For many years they have stood up as piling, withstanding both salt water and brackish atmosphere.

As a result, palms have been in great demand as a building material but never have been used on a wide scale or very effectively. Of course some houses have been made of palms, including the simplest type of log construction. At the proper season, the palm will respond more readily to the axe than pine or oak.

So this was the situation when Mr. McCrary returned three years ago to Lakeland: The palms were not only tough and good building material—they were too good! Although he had lived in Lakeland years before, and his nearest relatives remained there he had come to do an engineering job which didn't quite develop.

Meanwhile, he learned that World War II had opened up experimentation with the saw palmetto and it had become a source of gun wads used by the navy. In short, he became so preoccupied with the palmetto and its possibilities that he

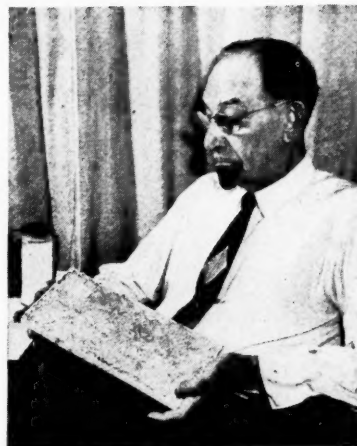
decided to top off an energetic career making a study of the hardy plant that grovels along the surface of the ground.

A native of Selma, Ala., and a graduate of Georgia Tech, Mr. McCrary early became interested in mechanical refrigeration, entering this field in Atlanta soon after his graduation from college. For many years he designed and manufactured such equipment, operating in cities from Houston, Tex., to South Norwalk, Conn., including New York and Washington.

In 1910 the Bureau of Standards called him in and he worked out a system of air conditioning the cabinet room in the White House. All told, he installed five refrigerating plants in Washington government buildings. When World War I came along, he went with the U. S. shipping board as an engineer.

Among his various achievements, McCrary, a member of the Society of American Military Engineers, appears to be proudest of the gold medal awarded him by the Jamestown Tercentennial Exposition in 1907 for his work in refrigerating machinery.

Now 76 years old, Mr. McCrary lent himself to endless study of the palmetto, but was handicapped from the first. He had no facilities for



*Above—P. R. McCrary, Lakeland, Fla. mechanical engineer, holds a slab of building material made from the fiber and cork of the Florida saw palmetto, plus limestone and a chemical.*

pursuing his experiments as this was something new to him.

He solved his problems by using a band saw and a local sugar cane mill, and fashioning a shredder from a wood paddle containing a half-dozen nails and taking a trip to a hammer mill in St. Louis. In all, a ton of palmetto was broken down for him by the mill in St. Louis.

*(Continued on page 74)*

*Below—Florida saw palmetto, such as the slab in the left background, was the source of these samples of building tiles, brushes and the tannic acid in the bottles at the right.*





Above—One of the world's large aluminum rolling mills. It is located at Alcoa, Tenn.

## Aluminum Fabrication Grows in South

**S**MOKESTACKS poke into the blue skies at Alcoa, Tenn., 12 miles south of Knoxville.

They are about half way between the sprawling atomic energy plants in Oak Ridge and the mile-high peaks of the Great Smoky Mountains National Park, which draw more than a million visitors a year.

Alcoa is symbolic of the new industrial South.

Aluminum — its use increased many fold during World War II — is playing an increasingly important role in the postwar economy and industry in the South, where many manufacturers are turning to this metal to meet the demands of consumers in what many term "The Light Metal Age."

While there were many aluminum fabricators in the South before World War II, the knowledge gained in supplying demands of the armed forces and the many applications have broadened the field.

More than 200,000 workers in the South were trained in working aluminum during the war, in aircraft and other industries, making available a reservoir of skilled labor fully acquainted with the light weight, strength, durability and corrosive resistance of the metal.

The hub of the industry in the South is the large plants of the Aluminum Company of America at Alcoa, the largest aluminum producing center in the United States.

by

**Warner Ogden**

The plants in Alcoa include a reduction plant where aluminum is smelted, a foil mill, two rolling mills producing sheet and plate and five hydro-electric projects in the Great Smoky Mountains of Tennessee and North Carolina.

The reduction plant is the largest in the United States and is now in production 24 hours a day to meet the demand for aluminum pig.

The North Plant, with 58 acres, or 2,405,000 square feet of floor space under one roof, went into production in September, 1941. It was producing huge quantities of sheet for military needs before Pearl Harbor and now is producing for civilian needs.

The West Plant, covering 1,600,000 square feet of floor space, was the first aluminum rolling mill in the South. Constructed in 1920, it has been steadily expanded. A foil mill is being added to its equipment to meet the growing consumer demand.

To meet the increased demand in the South, two additional sales offices have been opened and two others are planned.

This was in line with the announcement by Roy A. Hunt, presi-

dent of the Aluminum Company of America, that "As evidence of the growing acceptance of aluminum for new applications, a trend the industry hopes to accelerate during the coming year, the industry will depend for volume, in part, upon applications comparatively little known until now in the nation's largest industries."

Commenting on the shortage of aluminum for consumer goods, despite large increases in production facilities during the war, George R. Gibbons, senior vice-president, recently said, "Wartime conditions placed production emphasis on standardized specifications of aluminum for airplane construction and other uses, in contrast to peacetime requirements for a much broader range of alloys and diversified products. Except for delays occasioned by labor difficulties and material shortages during the first postwar year, however, the reconversion of the aluminum industry has been relatively rapid and encouraging."

The South has reconverted rapidly and many workers engaged in aluminum fabrication during the war, now have established themselves in businesses of their own producing aluminum products ranging from toys and novelties to furniture, bus bodies and pre-fabricated houses.

One such case was Smyrna Industries, Inc., at Smyrna, Ga., where

**Right—Pulpwood loader made by Rite Equipment Co., Mobile, Ala.**

a group of Bell Aircraft employees at Marietta, Ga., began construction of aluminum kitchen stools on a small scale. The plant, originally housed in farm buildings, now is being moved into permanent headquarters. The industry, headed by S. J. Huggins, as president, has added a line of breakfastroom suites and aluminum toys to its line of products.

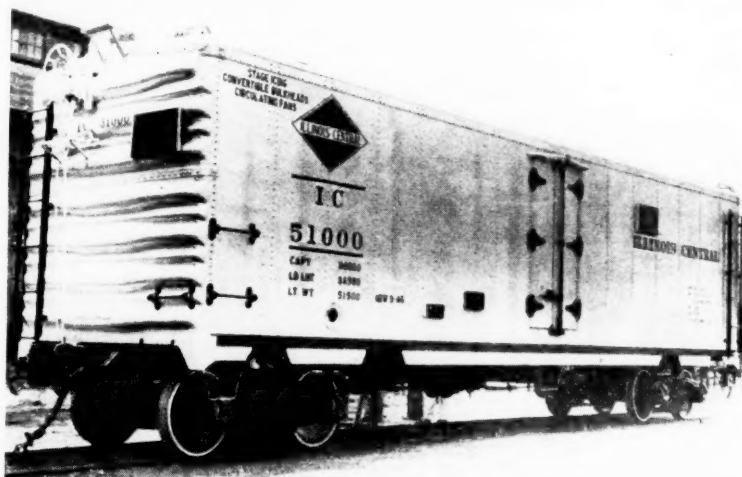
One of the largest aluminum fabricators in the South today is the Southern States Iron Roofing Co., Savannah, Ga., which entered the aluminum field in the late days of the war to fill a contract for prefabricated barracks and shell houses for use by the Army in the South Pacific. Southern States is manufacturing V-riimp and corrugated roofing sheet, aluminum shingles, sanitary latrines and only recently announced a compact prefabricated aluminum house.

In addition to Savannah, the company has plants in Birmingham, Hattiesburg, Miss., and Columbia, S. C.

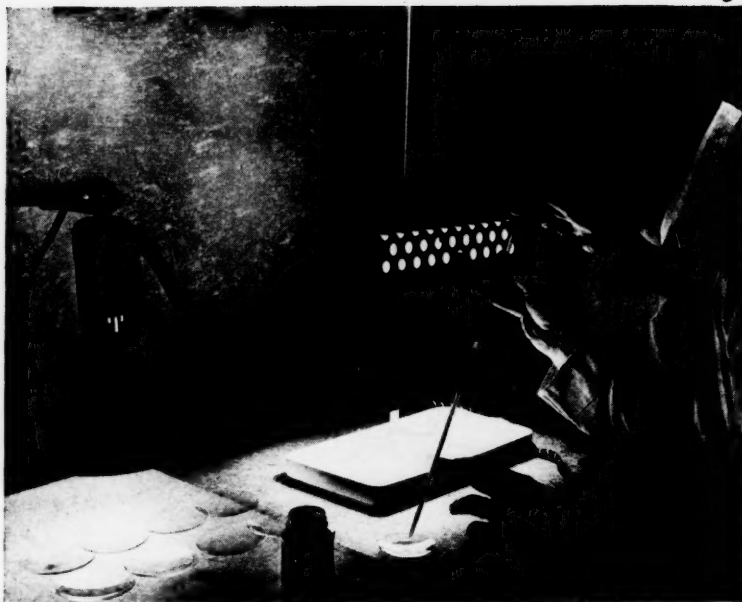
Another new producer is Race and Race, Winter Haven, Fla., who are manufacturing aluminum irrigation pipe and ladders for the Florida citrus industry.

The Illinois Central Railroad recently completed and placed in operation an aluminum refrigerator car. The car is of new design and can quickly be converted for handling merchandise on a return trip. The car was built in the I.C. Shops at McComb, Miss., under the sponsorship of the car committee of the Association of American Railroads, the United Fruit and Vegetable Growers Association, from plans drawn by I. C. Engineers in coopera-

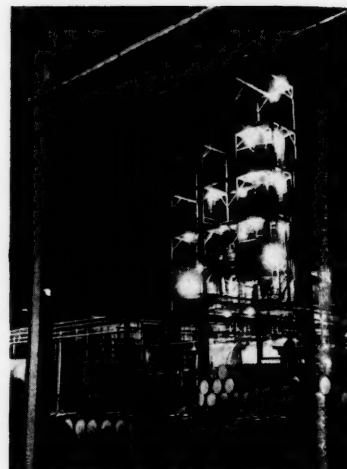
**Right—In this barn loft assembly line workers of Smyrna Industries, Inc., Smyrna, Ga., are adding the finishing touches to kitchen stools. A breakfast room suite and toys are on the firm's product list.**







Above—During the intricate manufacturing process at the Virginia streptomycin plant a constant check is kept to be certain the drug comes up to rigid specifications of quality and purity.



Above—Distillation tower at the new streptomycin plant. Solvents used in producing the new antibiotic are here recovered.

## Merck Operates Streptomycin Plant in Virginia Valley

**N**EW addition to the South's industrial diversification is the new Merck & Co., Inc. streptomycin plant at Elkton, Va. Part of a \$3,500,000 building program, this is the first plant designed for mass production of the "wonder drug."

Located in the heart of the scenic Shenandoah Valley, the three-build-

ing unit has more than 50,000 square feet and contains specially-designed equipment to convert tons of raw materials to gallons of sterile solution of the finished drug. Final drying, packing and shipping are done at the Rahway, N. J. unit.

Streptomycin, an antibiotic derived from a microscopic soil organ-

ism, was discovered in 1944 by Dr. Selman A. Waksman of Rutgers University. Seeking assistance in further research and development, Dr. Waksman brought his findings to Merck & Co., Inc., whose technical staff soon discovered the amazing laboratory effectiveness of the drug against certain types of infections. Further clinical research throughout the country soon proved the medical usefulness of the drug in the treatment of tularemia ("rabbit fever"), influenzal meningitis, gram-negative urinary tract and pulmonary infections.

At Elkton production of the drug is started from living test-tube cultures of the organism, *Streptomyces griseus*. Through special processes, developed by Merck microbiologists, chemists and engineers, these organisms are put through repeated stages of growth, in which they multiply billions of times. This is done by introducing the tiny microbes into flasks of nutrient broth, a jelly-like substance composed of seaweed, peptone, glucose, dextrose, and meat extract. As the *Streptomyces griseus* multiplies, the growth is moved into larger and

(Continued on page 97)



Left—Section of new Elkton, Va. plant where Merck & Co. makes the new drug streptomycin in what is understood to be the first mass production unit of its kind in the world.

# Textile Industry Expansion Program Estimated at \$500,000,000 in Five Years

by J. A. Daly

**G**ROWING pains of America's tremendous textile industry rapidly are becoming epidemic, spreading to heretofore only moderately affected components.

Briefly, here are some illuminating statistics, accumulated by the textile machinery industry, which summarize the whole industry's needs for expansion, renovation and modernization:

All divisions of the industry, largely located in the South, have combined postwar building and equipment programs estimated to cost altogether between \$400,000,000 and \$500,000,000 for the five-year, 1946-'50, period. This estimated aggregate would involve \$80,000,000 annually for the South Atlantic States, of which the North Carolina industry's part would be \$21,000,000 annually.

Meantime, the vast spinning and weaving divisions are readjusting their production and marketing to free trade that returned when OPA control ended—all the while continuing their expansion.

But, it is only now that American business is becoming impressed by an array of acute modernization-expansion ailments which afflict the little-publicized knitting division, particularly the fine hosiery segment.

These difficulties follow lean war years and are aggravated by record consumer demands for sheer hosiery.

The knitting division is split, by their diverse products, into several major elements. More important among these, with respect to capital investment and value of production, are synthetic yarn hosiery, cotton underwear, men's and children's socks, and wool knit goods.

The immense cotton underwear and wool outerwear knitting segments, scattered over much of the United States, likewise are confronted with complex problems, which, however, are less acute than the hosiery knot-



*Above—Four-story addition to Joanna Textile Mills, Inc., at Goldville, S. C. The building is the first step in a \$2,150,000 expansion program. Lockwood Greene Engineers, Inc., of Spartanburg, are the engineers; Daniel Construction Co., Greenville, the contractors.*

ters' difficulties, with which this article largely deals.

Physical expansion, complicated by shortages of construction materials, is approaching record levels, notably among mills knitting nylon and rayon hosiery. This expansion apparently must continue over a period of at least two years. The new equipment bottleneck is another factor governing progress.

A recent dependable industry survey disclosed that expenditures totaling more than \$22,250,000 are committed in current projects of the

knitting companies of Pennsylvania and the South. By far the greater part of this investment is directed toward meeting the truly amazing increase in demand for women's full-fashioned hosiery.

The essential machinery is on order, and some is being delivered. The expansion ranges from additions at existing plants to large new plants and a multitude of small enterprises located in basements, storerooms and converted structures. At the same time, the great American producers of synthetic, fine yarns are expending at least \$100,000,000 on announced additional capacity, a substantial part of which will be required by knitters—but a year or two must elapse before much of this yarn increase will be available.

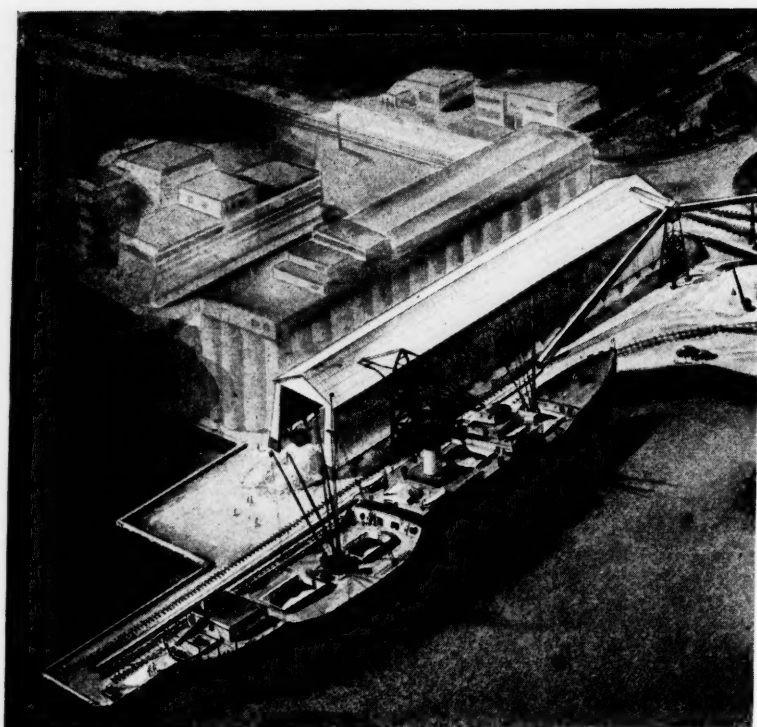
Intimately related to the future production of fine hosiery is Du Pont's \$50,000,000 expansion, which includes new nylon plants at Chattanooga, Tenn., and Martinsville, Va., and enlargement at Seaford, Del. Appropriate it is to comment here that only a few heretics remain who insist that a worm can make better "silk" than a chemical plant.

Something approximating the "integration" of the weaving industry is developing also among the knitters. This is reflected in construction

(Continued on page 64)

*Gown embroidered with Lastex yarn.*





*Left—Pier and unloading facilities being built by the City of Baltimore for lease to the National Gypsum Co.*

## National Gypsum President Lays Cornerstone for New \$6,000,000 Baltimore Plant



**N**ATIONAL Gypsum Company's recognition of the future of the South was emphasized last month when Melvin H. Baker, president of that Buffalo concern said his company's faith in the ultimate success of southern industry is being expressed by investment in that future.

Speaking before the Advertising Club of Baltimore at a luncheon preceding the laying of the cornerstone for the \$6,000,000 plant being built at Baltimore by National Gypsum Company, Mr. Baker said his company is putting its money into the market of the South with plants in Savannah, Ga., Mobile, Ala., and Rotan, Texas all scheduled for expansion and a new \$3,000,000 plant under construction at Kimballton, Va., for production of lime.

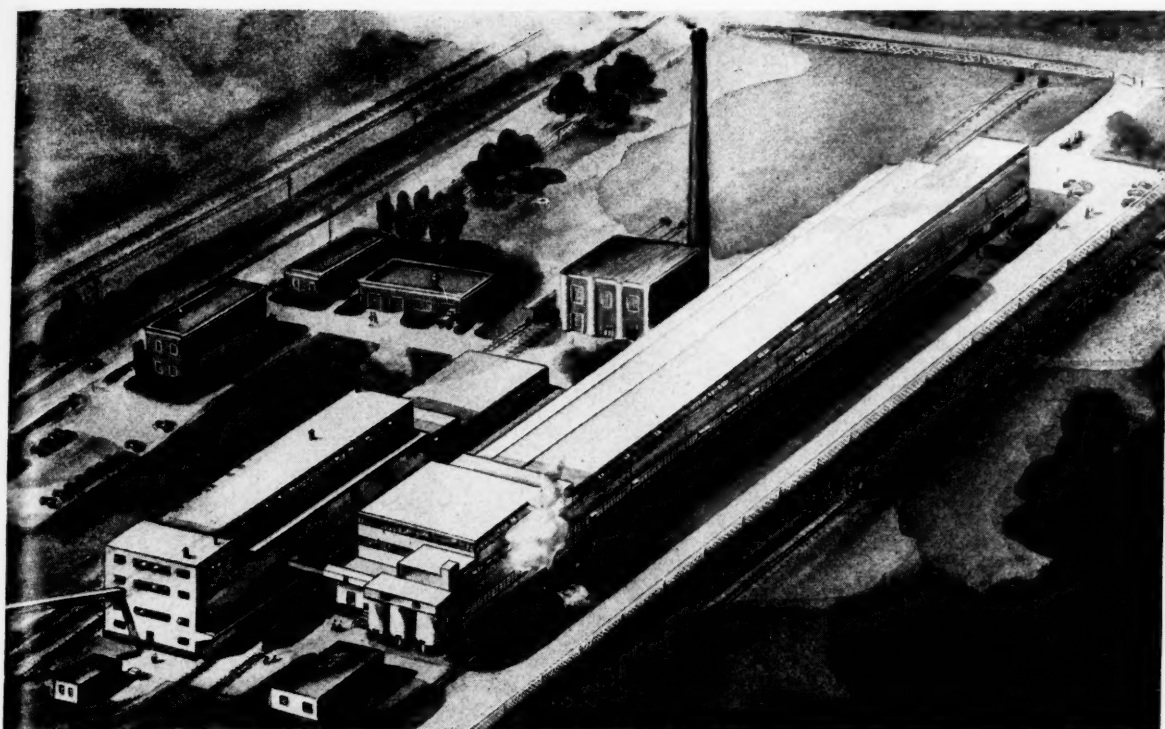
The Baltimore plant, he said, is the "most modern gypsum plant in the world." "These new projects are required to meet the growing demand—a pretty definite indication of what we think of the future," he emphasized, continuing with a tribute to Baltimore "as one of the dominant metropolitan areas of the Southeast" destined to "play an important role in a new, more prosperous South."

The cornerstone ceremony was held on the 17-acre site in the Canton section of the Monumental City where the \$6,000,000 gypsum wall-board, lath, sheathing and plaster plant is now in the foundation stage. Walls of the brick office building in which the cornerstone was placed have advanced about one story. Concrete piles are being driven and concrete is being poured into foundation sections of the plant proper.

Nearby, the City of Baltimore is proceeding on a pier to be equipped with unloading facilities to handle the gypsum brought from Nova

*Left—Melvin H. Baker, National Gypsum president, places mortar on the cornerstone of the \$6,000,000 plant his company is constructing at Baltimore. Mayor Theodore H. McKeldin, of Baltimore, faces the camera; Victor Frenkil of the Baltimore Contractors, Inc., hat in hand, watches with interest.*





*Above—The \$6,000,000 plant being constructed at Baltimore by National Gypsum Co. Hall, Turpin and Wachter are the engineers for the project; Baltimore Contractors, Inc., the contractors.*

Scotia mines to the huge new plant. Three 10,000-ton vessels have been purchased to transport the gypsum, a fact which Mr. Baker said would further reduce the cost of production in the Baltimore market.

The \$1,519,000 municipal pier, which will have a capacity for handling 500-tons of gypsum an hour is being constructed on a 314 by 700-foot site on the Baltimore waterfront. The project includes a wharf and pier about 570 feet long and 60 feet wide and a storage shed approximately the same length but about 75 feet wide and 84 feet high. The shed will be used for rock storage and will be of structural steel construction.

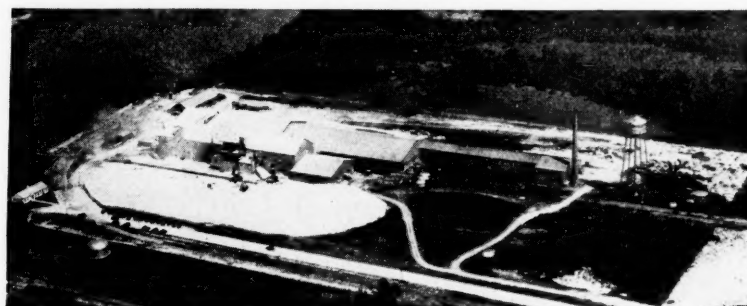
Features of the municipal project will be an unloading tower, a conveyor system, an overhead traveling crane and several electric trimmers and scrapers. These latter are for spreading the rock in the 60,000-ton storage shed. Conveyors several thousand feet in length will receive the rock as it is unloaded from ship-side, transport it to storage, distribute it over the storage area. Another conveyor will reclaim it for

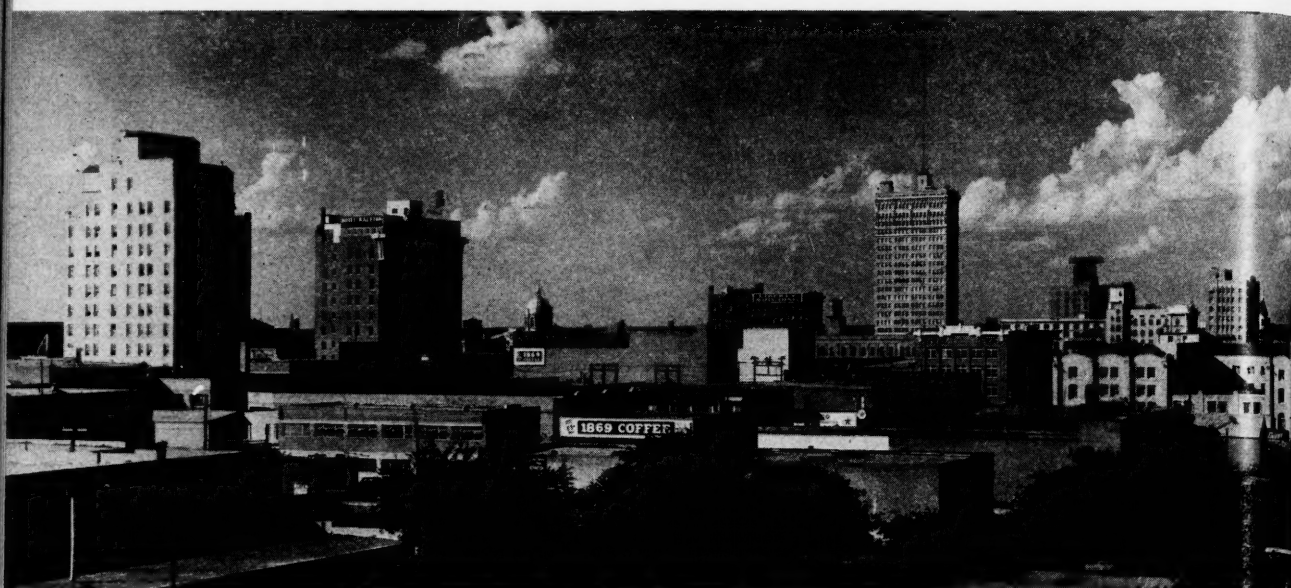
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*Above—Expansion at Rotan, Texas, is similar to the work at Savannah. Gypsum board facilities were finished in September; Calcining and grinding equipment for plaster is scheduled for installation by next July; total cost, 1,000,000.*

*Below—Second phase of expansion at National Gypsum Company's Savannah, Ga., plant will be finished early next year; the third phase, next July; total cost, \$750,000. First phase involved many efficient production methods.*





Above—Skyline of Waco, a city whose population has grown from 71,000 in 1940 to the present estimated figure of 96,500.

## The Awakened Waco

by

Paul D. Marable, Jr.

**F**ROM its very beginning the town-site was marked for industry, for history tells us that the very first house in what is now Waco, Texas, was built by a manufacturer.

One hundred years ago Jesse Hutton established here his house and a blacksmith shop where he made shoes for the horses of chance trav-

elers and of Indian tribes roaming the beautiful and fertile valley of the Brazos River. A small industry to be sure, but the forerunner of more than 150 manufacturing establishments that now give Waco claim to a place among the first five industrial cities of Texas.

Employment in manufacturing industries has quadrupled within the last six years in Waco, and its industrial development has brought the recent comment from a national weekly magazine that "for sheer industrial ecstasy Waco is perhaps the state's peak."

Business indices show significant increases in every phase of activity. Real estate sales, January to July of this year, totaled \$8,306,935—more than seven times the \$1,186,260 reported for the first half of the last pre-war year, 1941. Bank clearings for the first six months of this year, \$38,612,614, more than doubled the total for the similar period of 1941. Bank debits to individual accounts amounted to \$192,848,000, January to July, or \$114,449,000 more than the half-year report for 1941.

But it has been only within the last decade that Waco has waked to its potentialities as a hub of industry. With the recent war came the first major stirring of interest in the potentialities of industrial development in the Southwest—an interest which has quickened during

Below—Pat Neff hall, administration building at Baylor University, Texas' oldest institution of higher learning.



**Right—Top—J. M. Wood Manufacturing Co., one of six clothing producers in Waco.**

**Right—lower—One of Waco's small industries—the branch plant of Chlorine Solutions, Inc.**

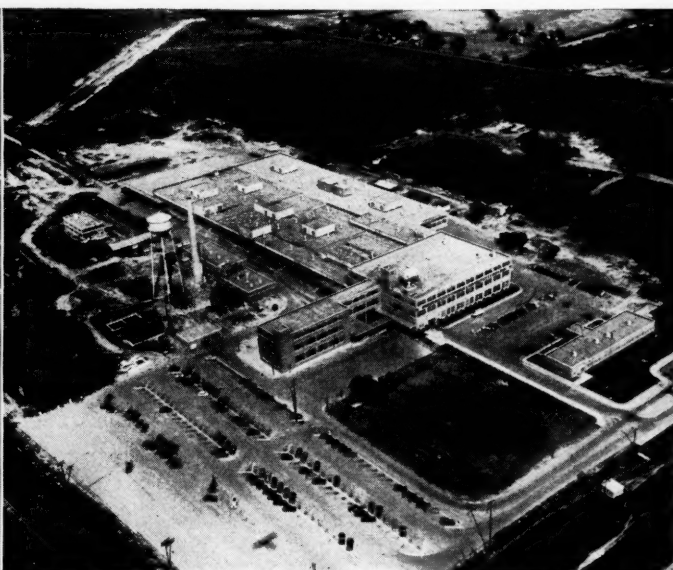
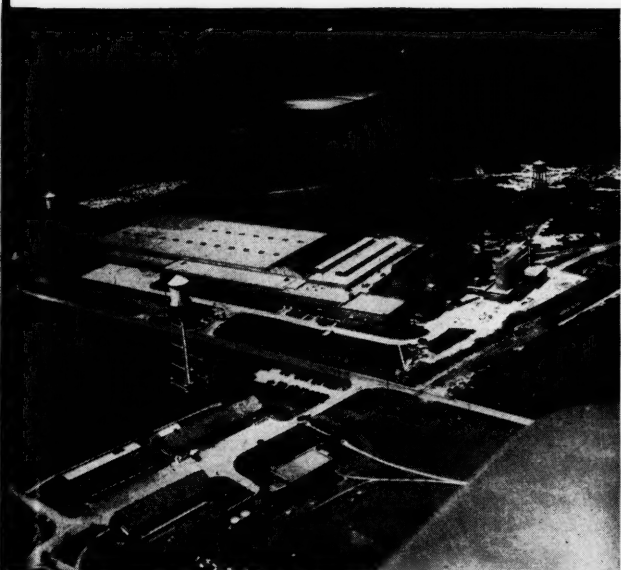
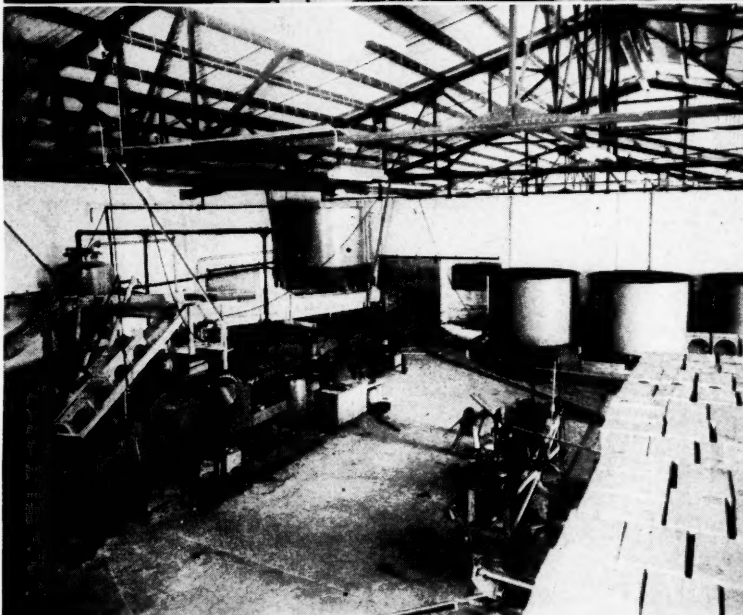
reconversion of industry to peacetime production. With the effective decentralization of wartime production effort came the realization that the same type of decentralization can aid the efficiency of peacetime manufacturing. Taking production plants to the source of raw materials instead of shipping the raw materials to a corner of the nation for processing and redistribution had made sense to industrialists.

With industry on the march to the Southwest and to Texas, Wacoans asked themselves, "What have we to offer industry?" And out of the pioneer past came the voice of the smithy who had chosen this broad bend of the Brazos as the site for his horseshoe industry. Waco's location is almost the exact geographical

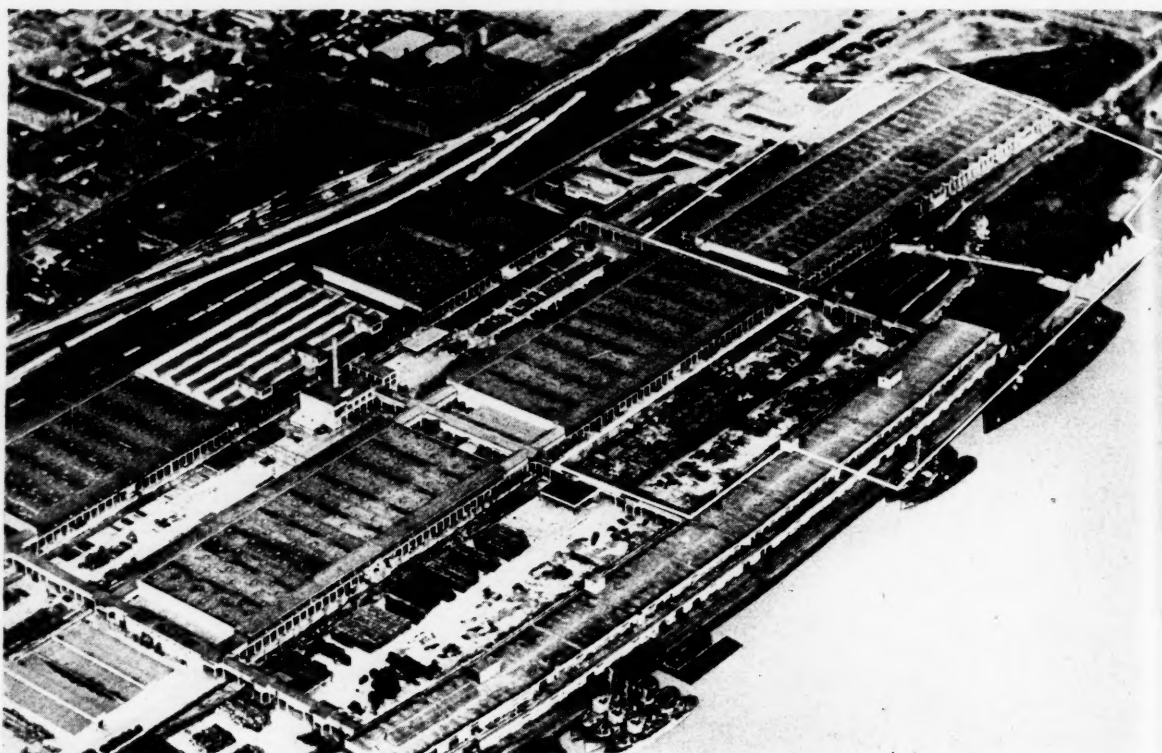
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**Below—left—The \$2,000,000 plant of Owens-Illinois Glass Co., which this year will ship approximately 6,000 carloads of glass containers into the southwestern territory.**

**Below—right—General Tire and Rubber Company's \$6,000,000 Waco plant, the first tire manufacturing project in Texas and the Southwest.**







Above—The Nation's second foreign trade zone at New Orleans, La. Dedicated late in November, the zone occupies 1,171,800 square feet in the public cotton warehouse and makes it possible for commodities to be brought from other countries for processing and re-shipment. Import duties are paid only when the merchandise passes from the free port area into the hinterland.

## Foreign Trade Zone Dedicated at New Orleans Is Second in the United States

**T**HE second Foreign Trade Zone or "free port" in the United States was dedicated late in November in the Port of New Orleans. The new free zone occupies 1,171,800 square feet of space in the modern Public Cotton Warehouse building located at Napoleon Avenue and the Mississippi River.

Opening of the New Orleans Foreign Trade Zone, whose application was approved recently in Washington, makes it possible for commodities and merchandise from other countries to be brought into the "free port" for processing and manipulation without payment of customs duty. The only other such area in the United States is located in New York.

The dedication of the New Orleans free port was part of the program in connection with the celebration of International Week November 14-19. Speakers at the event included Robert L. Simpson, president of the Board of Port Commissioners, W. R. Johnson, commissioner of customs, Washington, D. C., Thomas E. Lyons, secretary of the National Foreign Trade Zone Board, Washington and Fan Hao, collector of customs for China.

Establishment of the New Orleans "free port" will provide increased employment for many. Operations will include the bottling of imported liquors and brandies, examination of imported materials, the conditioning of Brazil nuts, the repackage-

ing of Latin American meats and meat products, the cleaning and re-packaging of seeds, grains and drugs from the four corners of the earth.

In a "free port" or foreign trade zone, no export or import duties are levied. The zone's income arises from charges for services rendered, such as wharf dues and warehouse rentals. Import duty is payable only when goods pass from the free port area into the hinterland. Enforcement of Federal regulations in the zone are under the supervision of the U. S. Customs service.

Authorization for foreign trade zones in the United States are approved by a federal board consisting of the secretaries of commerce, treasury and war, with the secretary of commerce acting as chairman. Mr. Lyons, who was one of the speakers at the dedication, is executive secretary of the board.

Merchandise of foreign origin may be stored, broken up, repacked, assembled, distributed, sorted, graded, cleaned or otherwise manip-

(Continued on page 61)

**A** NEW \$11,000,000 plant at Port Wentworth, Ga., will be producing paper liner board and related products at the rate of 450 tons a day before the end of 1947, according to plans of the Southern Paperboard Corp., subsidiary of Robert Gair Co., Inc.

Construction on the huge plant, which is to be located on a 160-acre tract seven miles northwest of Savannah, began early last month when forces of the Raymond Concrete Pile Co. drove the first of the 3,000 piles to be required in the foundations for buildings to cover an area of 260,000 square feet.

As described by D. G. Moon, consulting engineer of J. E. Sirrine & Co., engineers for the project, the buildings generally will be of steel frame, concrete foundations, floors and grade beams, with 8-inch brick curtain walls and corrosion-resistant sash. Roofing will be of precast concrete slabs overlaid with insulating board where needed.

Corrugated asbestos siding is to be used for some of the temporary walls, for the sheds and in the canopy or open type construction developed for the recovery, digester and wash buildings. Foundations will consist of concrete footings on cast-in-place concrete piles with spread footings for the lighter loads. Quantities of materials to be used in addition to the piles include 3,500 tons of steel, 12,000 cubic yards of concrete, 70,000 square feet of sash, as well as about 25 miles of pipe.

Facilities included in the mill are wood preparation and handling, digesters, wash room, screen room, refining, paper machine, roll handling, recovery of chemicals, power plant, electrical distribution, water supply, and the main office building, locker, wash and rest rooms, and a fully equipped laboratory.

The plant will be served by the Savannah and Atlanta Railway which connects with the other railroads into Savannah. A dock is to be constructed. This will allow deep water shipment of finished products, as well as for incoming materials such as wood, oil and chemicals.

Process water for the mill will be furnished from the new filter plant to be built as part of the Savannah industrial and domestic water supply system. A minimum of 10,000,000 gallons of clear, soft potable



*Above—Forces of Raymond Concrete Pile Co. drive the first pile for the \$11,000,000 mill being constructed at Port Wentworth, near Savannah, Ga.*

## Pile Driving Started for \$11,000,000 Paper Board Plant at Savannah, Ga.

water will be supplied daily.

Provision has been included in the design, Mr. Moon stated, for future addition of a bleach plant, a second paper machine and what is known as a converting plant for manufacture of corrugated boxes.

Facilities to be constructed include:

### Wood Preparation and Handling

The wood yard is to be arranged for storage of fifteen thousand cords. Railroads, vessels, and trucks will bring this wood. Four steel conveyors will parallel railroad tracks and the fifth will receive wood brought by water. Two 12 by 45-foot barking drums are to be installed. Rossed wood from these drums will be

*(Continued on page 59)*

*Below—The \$11,000,000 Southern Paper Board plant, as it will appear when finished at Port Wentworth, northwest of Savannah.*





Above—Construction of the expansion of the Allied Steel Products Corp., Tulsa, Okla., is practically completed, according to E. C. Hinkfent, president. Located on a new 10-acre site, the company fabricates and erects combination structural and sectional steel structures and now distributes its products throughout North and South America and several Asiatic areas.

## SOUTHERN CONSTRUCTION CONTRACTS

### \$1,663,051,000 IN ELEVEN MONTHS

CONSTRUCTION awards below the Mason and Dixon line during the elapsed eleven months of this year total \$1,663,051,000, a gain of sixty-two per cent over the \$1,026,105,000 for the comparable period of 1945 and more than twice the figure for the first eleven months of 1944.

The November total for southern contracts, as compiled from reports

to the *Daily Construction Bulletin* of the MANUFACTURERS RECORD, was \$150,933,000, or a seven per cent decrease from the \$163,884,000 of the preceding month but a twenty-seven per cent rise when compared with the \$118,108,000 of the same month of last year.

The current \$1,663,051,000 total for eleven months embraces more

by

Samuel A. Lauver

substantial figures for private building, engineering projects and highways and bridges than its counterpart of last year. Current eleven-month private building awards are more than four times the figure for the same period of last year.

Highway and bridge awards so far this year are over three and one-third times the 1945 eleven-month total. Heavy engineering placed under contract amounts to more than one and one-half the total for the first eleven months of last year. Public building is ahead and industrial construction has leveled off when compared with values tabulated last year.

Private building values, as accumulated for the eleven months are \$383,741,000. Residential construction made up the bulk of the total with a valuation of \$280,258,000. Commercial building amounted to \$59,633,000; assembly buildings, \$23,396,000 and offices, \$20,454,000.

How the private building picture has changed from last year can be seen by comparing the 1946 figures with those for 1945 when the private

#### SOUTH'S CONSTRUCTION BY TYPES

	November, 1946 Contracts Awarded	November, 1946 Contracts to be Awarded	Contracts Awarded First Eleven Months 1946	Contracts Awarded First Eleven Months 1945
<b>PRIVATE BUILDING</b>				
Assembly (Churches, Theatres, Auditoriums, Fraternal) .....	\$ 1,282,000	\$ 8,046,000	\$ 23,396,000	\$ 15,951,000
Commercial (Stores, Restaurants, Filling Stations, Garages) .....	2,803,000	6,064,000	59,633,000	26,667,000
Residential (Apartments, Hotels, Dwellings) .....	15,849,000	7,505,000	280,258,000	42,044,000
Office .....	1,119,000	1,475,000	20,454,000	8,834,000
<b>INDUSTRIAL</b> .....	\$ 21,053,000	\$ 23,090,000	\$ 383,741,000	\$ 93,496,000
<b>INDUSTRIAL</b> .....	\$ 67,745,000	\$146,062,000	\$ 434,479,000	\$ 440,547,000
<b>PUBLIC BUILDING</b>				
City, County, State, Federal .....	\$ 5,288,000	\$100,152,000	\$ 141,774,000	\$ 174,261,000
Housing .....	.....	510,000	9,007,000	18,623,000
Schools .....	4,606,000	71,195,000	91,773,000	29,306,000
<b>ENGINEERING</b>				
Dams, Drainage, Earthwork, Airports .....	\$ 12,509,000	\$ 14,671,000	\$ 184,369,000	\$ 106,604,000
Federal, County, Municipal Electric .....	900,000	28,231,000	24,820,000	23,764,000
Sewers and Waterworks .....	6,698,000	45,001,000	54,368,000	39,346,000
<b>ROADS, STREETS AND BRIDGES</b> .....	\$ 20,107,000	\$ 87,903,000	\$ 263,557,000	\$ 169,654,000
<b>BRIDGES</b> .....	\$ 32,134,000	\$ 39,301,000	\$ 338,720,000	\$ 109,216,000
<b>TOTAL</b> .....	\$150,933,000	\$468,213,000	\$1,663,051,000	\$1,026,105,000





Above—Building proposed by the Miami Beach Railway Co., Miami, Fla.

building total amounted to \$93,496,000 for the eleven months and included \$42,044,000 for residential building, \$26,667,000 for commercial structures and \$15,951,000 and \$8,834,000 for assembly and office projects, respectively.

The current eleven-month highway figure is \$338,720,000. For the similar period of last year this figure was \$100,216,000. Even considering the greatly increased costs of such work, the current figure indicates a much larger amount of highway and bridge construction has been placed under contract so far this year than during the compared period of 1945.

Texas, with its great area, leads the list of southern states in the highway award field. The Lone Star State, according to reports received this year, has been the scene of contracts totaling \$85,631,000. Nearest contenders were North Carolina and South Carolina. Totals for these were \$26,784,000 and \$26,333,000, respectively.

Engineering construction contracts for the eleven months are valued at \$263,557,000, as compared with the \$169,654,000 for the similar period of 1945. The current figure includes \$184,369,000 for dams, drainage, earthwork and airports; \$54,368,000 for sewer and water construction and \$24,820,000 for government electric projects.

Public building contracts so far this year are valued at \$242,554,000 compared with \$222,192,000 for eleven months of 1945. Public housing awards contributed \$9,007,000 to the total; schools, \$91,773,000; government buildings, \$141,774,000. Southern states where totals for such are fifteen million dollars or above are Alabama, Florida, Maryland, North Carolina, South Caro-

## SOUTH'S CONSTRUCTION BY STATES

	November, 1946 Contracts Awarded	Contracts to be Awarded	Contracts Awarded First Eleven Months 1946	Contracts Awarded First Eleven Months 1945
Alabama .....	\$ 7,438,000	\$ 26,872,000	\$ 68,260,000	\$ 98,044,000
Arkansas .....	491,000	848,000	44,494,000	9,934,000
Dist. of Col. ....	4,730,000	1,182,000	18,109,000	30,808,000
Florida .....	11,588,000	53,303,000	183,743,000	68,512,000
Georgia .....	5,254,000	24,598,000	130,120,000	47,980,000
Kentucky .....	1,396,000	9,742,000	43,291,000	20,202,000
Louisiana .....	5,240,000	9,283,000	81,752,000	52,780,000
Maryland .....	4,905,000	32,636,000	142,015,000	74,446,000
Mississippi .....	1,932,000	19,150,000	62,345,000	35,291,000
Missouri .....	2,632,000	23,162,000	47,699,000	40,323,000
N. Carolina .....	2,996,000	31,284,000	71,654,000	53,384,000
Oklahoma .....	394,000	3,722,000	48,820,000	31,146,000
S. Carolina .....	51,429,000	14,112,000	122,068,000	17,684,000
Tennessee .....	3,089,000	16,070,000	97,851,000	52,295,000
Texas .....	42,091,000	178,383,000	431,308,000	315,663,000
Virginia .....	2,723,000	13,313,000	55,657,000	61,905,000
W. Virginia .....	1,995,000	10,553,000	13,505,000	15,708,000
<b>TOTAL .....</b>	<b>\$150,933,000</b>	<b>\$468,213,000</b>	<b>\$1,663,051,000</b>	<b>\$1,026,105,000</b>

lina, Tennessee, Texas and Virginia.

Value of southern industrial construction this year is placed at \$434,479,000. Last year at this time the figure was \$440,547,000. The 1944 eleven-month figure was \$176,840,000. Restrictions, combined with shortages have seriously curtailed such construction, although a number of important new projects have been initiated during the year.

The \$150,933,000 value placed on

southern construction in November places the month fifth among the months of 1946. Four other months showed higher valuations. These are: April, \$214,494,000; July, \$181,845,000; May, \$169,600,000; October, \$163,884,000. The average of monthly contract value figures is \$163,272,000.

Industrial contracts with a total of \$67,745,000 led during November.

(Continued on page 57)

Below—Perspective of Hermann Hospital, Houston, Texas. Kenneth Franzheim and Hedrick & Lindsley are architects.



# News from Industry

## Personnel

**Roy B. White** was reelected president of Baltimore & Ohio R. R. Co., at the recent annual meeting of the board of directors. **Stewart McDonald** was renamed chairman of the executive committee. Other officers elected: C. W. Van Horn, Golder Shumate, R. L. Snodgrass, E. H. Burgess, W. L. Price and G. Murray Campbell, vice presidents; C. A. Rausch, secretary; and J. J. Jenkins, treasurer.

**Alec M. Crowell** of Jackson, Miss., has been appointed to the post of director of the production division of the Oil and Gas Division of the U. S. Bureau of the Interior. A native of Monroe, N. C., Mr. Crowell attended the Universities of North Carolina and Kansas. Since January 1945 he had been director of the Mississippi Oil and Engineering Committee of the Interior Department.

**Frederic E. Lyford** has succeeded Lewis L. Smith as president and a director of Merritt-Chapman & Scott Corp., of New York. Mr. Smith is retiring after 40 years of service with the company which specializes in engineering construction, marine salvage and heavy hoisting.

**Chester F. Smith**, a director of Standard Oil Co. of N. J., has been named a vice president, as announced by Eugene Holman, company president. Since 1944 Mr. Smith has been chairman of the Coordination Committee, a central study and advisory group for the management personnel of the company.

**Lt. Col. Frederick W. Erhard**, graduate of Texas A & M College, and now an assistant director of the Apprentice Training Service, U. S. Dept. of Labor, has been awarded the Legion of Merit citation for meritorious service in the Ordnance Department. He was with the Army until July, 1946.

**Homer A. Goddard**, lubrication engineer, has been appointed assistant division manager in charge of industrial lubricating sales for the Pittsburgh division of Gulf Oil Corp., embracing western Pennsylvania and West Virginia. He succeeds S. A. Newman who has been advanced to chief turbine lubrication engineer in the general office. Mr. Goddard, with the company since 1932, has been serving as superintendent of industrial lubricating sales for his present territory.

**Dr. J. B. Austin** has succeeded Dr. John Johnston, retired, as director of the research laboratory of United States Steel Corp., according to announcement by Benjamin F. Fairless, president of the corporation. Dr. Austin moves up from the position of assistant director. He has been associated with the laboratory since its inception.

**Colgate W. Darden, Jr.**, chancellor of the College of William and Mary, Williamsburg, Va., has been elected a director of United States Rubber Co. An attorney by profession, Mr. Darden was a member of the Virginia General Assembly two terms, 1930 to 1933, a representative in Congress in the 73rd, 74th, 76th and 77th Congresses, and governor of Virginia for the term which expired Jan., 1946. As U. S. Rubber director, he succeeds Lammot du P. Copeland of Wilmington, Del., who had been a director of the company since 1940.

**Ned Landis**, recently lieutenant commander in the U. S. Navy, has been named branch manager of the Syracuse, N. Y., office of Allis-Chalmers Mfg. Co., headquarters Milwaukee, Wis., according to announcement by J. L. Singleton, manager of district offices for the company. Mr. Landis was formerly associated with the Cincinnati office of Allis-Chalmers. He succeeds Leonard R. Reid who has been transferred from the Syracuse assignment to the electric department at the company's main plant.

**Harry W. Bearfoot** has been appointed representative in the Philadelphia area for Kennametal Inc., Latrobe, Pa. Mr. Bearfoot's headquarters are at 3701 North Broad St., Philadelphia.

**John S. Coleman** is now president of Burroughs Adding Mch. Co., Detroit, succeeding Alfred J. Dougherty who resigned on advice of his physician. Mr. Coleman, a graduate lawyer, had been a vice president and director of Burroughs since 1944. Although only 49 years old, he brings to his new assignment more than 26 years' experience in Burroughs manufacturing and marketing.

**Raymond A. Matthews**, formerly vice president of the Arundel Corporation, is now president of the Kentucky Stone Company, Inc., 214 Fincastle Building, Louisville 2, Kentucky.

**B. E. Shea**, manager of naval stores sales for Southern States Iron Roofing Co., Savannah, Ga., has been elected to the company's board of directors. It is announced by J. W. McIntire, executive vice president. Associated with the company for almost 25 years, Mr. Shea has been factory manager in the Birmingham, Savannah and Hattiesburg plants. He now joins with F. O. Wahlstrom, J. W. McIntire, M. J. Beasley, J. B. Gibson, W. J. Mahany, S. W. Connerat, and M. C. Delaney to make up the board of directors.

**Knight Mfg. & Supply Co.**, 923 E. Fourth St., Tulsa, Okla., has been appointed distributor in the Tulsa area for Hewitt Rubber Co. of Buffalo. The new distribution center is headed by Frank Monahan and Dean Knight, specialists in engineering and belt and hose installation. In addition to Hewitt products, the distributorship handles a number of other equipment accessories required in the oil and related fields.

## Products and Services

**Transverse Testing Machine**, with capacity up to 10,000 pounds, hydraulically operated, has been announced by Steel City Testing Lab., 8843 Livernois, Detroit 4. The apparatus is described as being highly sensitive and adaptable for transverse tests up to its full capacity; loads are applied automatically, at selectable speeds. Gauge becomes stationary when specimen breaks, enabling a reading at breaking point and the gauge may be calibrated in kilogram loads if desired.

**Industrial Valves**, with reduction in pressure drop, and non-rising stem type, are announced by Parker Appliance Co., 13725 Euclid Ave., Cleveland. Both needle and shut-off types are offered in six variations of connection arrangements. Straightline types are offered with female pipe threads or tubing threads. The valves are described as unusually small and compact, being forged of brass bodies.

**High-Lift Truck**, hydraulic type, by Lyon-Raymond Corp., 2922 Madison St., New York, is recommended by its makers for stacking or tiering where speed of elevation is important. Available with either one half or three quarter horsepower motor containing power unit consisting of motor, hydraulic gear type pump, valves, oil reservoir and necessary controls. Relief valve guards against overload.

**Huge Ford Truck**, claimed to be the largest ever built with capacity of 30 tons, may be seen in operation in several of the nation's largest steel mills, according to its makers, Automatic Transportation Co., who are now designing even larger models.

**Nonsettling Paint** becomes possible through the reported manufacture by Hercules Powder Co., Hopewell, Va., of a new chemical CMC, which, when added to paint will prevent the settling of pigment to the bottom of container. The chemical, carboxy-methyl-cellulose, is water soluble, and in addition to its application for paint, will be usable in oil-drilling processes and in production of synthetic rubber. In finished form, CMC is a fine white powder.

**Electric Foot Control**, for steel shears, has been developed by The Cleveland Crane & Eng. Co., Wickliffe, Ohio, and is reported to have been adopted as a standard feature on all size machines made by the company. Safety switch, connected to an outlet at front of machine, controls the movement of the shear blade. The foot switch requires only toe pressure, whereas the usual mechanical foot treadle requires leg movement on part of operator.

**New Type Locomotive**, a coal fired, gas turbine, operating on the same principle as the jet plane, was publicly revealed for the first time on Oct. 31, at a meeting at Johns Hopkins University, Baltimore. The new locomotive uses no water, consumes only a fraction as much fuel, in point of cost, as that used in Diesel oil, kerosene or gasoline turbines. It is estimated that its efficiency will

triple that of present steam locomotives. The project was financed by a fund of \$1,100,000 contributed jointly by railroads and coal companies. R. B. White, president of Baltimore & Ohio R. R. Co., was project chairman, and John L. Yellott was designer of the new engine.

**Distributing Warehouse**, for forest products, is announced as opened at Richmond, Va., 2510 Hermitage Road, by McEwen Lumber Co., headquarters High Point, N. C., dealers in forest products at wholesale. Opened under direction of Carrol E. Swinney, who has been a member of the organization for a number of years, the new distributing center is to be in charge of H. N. Forester, recently captain in the U. S. Army. Mr. Swinney will resume important duties at the High Point plant. The warehouse is 100 by 150 feet in area, bordered by a 23 by 170 foot storage shed, and is described by observers as one of Richmond's most modern structures for lumber merchandising purposes. The company, founded in 1899, is headed by W. B. McEwen, president and general manager, with C. D. Goldsmith as secretary.

**Air Compressors**, a new line, has been designed by Worthington Pump and Machinery Corp., Harrison, N. J., around established motor horsepower. Designated the "Air King," the line includes single stage and two stage sizes for pressures up to 250 psi for mating to standard motors of one to 15 horsepower. Arrangements include self-contained power driven models as well as bare compressors for direct or V-belt connection to drivers. Centrifugal clutch permits driving motor to attain full speed before compressor turns.

**Large Equipment Order**, calling for 4,000 journal bearings to equip 500 refrigerator express cars for Railway Express Agency, is reported received by The Timken Roller Bearing Co., Canton 6, Ohio. The bearings weigh 62 pounds each, and have inside diameter of 5 1/4 inches. Each car will require eight bearings.

**Prefabricated Warehouses**, designed and offered by A. Jay Hofmann Co., Narberth, Penn., are recommended by the manufacturer for situations where assembly, dismantlement and reassembly in the field are important factors. Precut frames, treated to resist moisture are offered in areas of 200, 400 and 580 square feet. Roof and sidewalls are of corrugated aluminum. Simple instructions and drawings are furnished for erection. Among advantages advanced are the reflective insulation qualities of aluminum which make the buildings cooler in summer and easier to heat in winter.

## Trade Literature

**History of Growth**, contained in 200-page, substantially-bound book, entitled "Fifty Years of Suretyship and Insurance," tells the story of United States Fidelity and Guaranty Co., of Baltimore, Md. The events of the company's career over the half century during which it has existed are put into written record, with notation of the milestones of progress.

**Southern Homes, Farms, Plantations, Estates**—Catalog of properties offered for sale in the territory from Maryland to Florida, containing illustrations and details—Published by Previews, Inc., a national real estate clearing organization, 49 E. 53rd St., New York, price \$1.00.

**Hercules Products**, including explosives, chemical cotton, paper makers chemicals, terpene and rosin chemicals and cellulose products, are pictorially described in a 20-page booklet, "A Trip Through Hercules Land." Uses of the products in twelve major industries are outlined in the booklet, issued by Hercules Power Co., Wilmington, Del.

**Centrifugal Blowers and Exhaustors** are described in Bulletin-B-13 by Roots-Connorsville Blower Corp., Connorsville, Ind. The bulletin contains 8 pages in two colors, stressing application of the products in connection with blast furnaces, coke ovens, oil refineries, chemical plants, sewage disposal works, large capacity vacuum service and related activities.

**Manual-Catalog**—Rochester Ropes, Culpeper, Va., has published a booklet on mining ropes which gives condensed coverage of the entire subject. About one third of the manual

is devoted to engineering data and general principles governing use and selection of ropes. Tables and illustrations are included.

"Gulfport" is the title of a booklet issued by Mississippi Agricultural & Industrial Board, describing Gulfport harbor facilities and outlining the strategic situation of the port for both import and export traffic.

**Jack Improvements**, described by Duff-Norton Mfg. Co., Box 1889, Pittsburgh 30, are outlined in a 40-page catalog, No. 263. Ratchet jacks, screw jacks, air motor operated jacks and hydraulic jacks are illustrated, together with a new 50-ton general purpose screw jack of the inverted type.

**Catalog**—Rust-Oleum Corp., Evanston, Ill., under the title "Rust-Oleum Stops and Prevents Rust," analyzes rust preventive requirements, with descriptive data on the uses, applications and engineering specifications of rust preventives. Specifications, listed typically, are presented through the use of color cards, showing various colors in which Rust-Oleum is obtainable.

**Annual Report**—In its 37th annual report, International Minerals & Chemical Corp., shows net profits of \$2,925,657, after all charges for the fiscal year ended June 30, 1946. Earnings per common share, for the year, were \$3.92, compared with \$2.76 for the previous year. Net sales for the year were \$31,373,106, representing a 13 per cent increase over the previous year.

**Catalogs**—Three booklets by S. Morgan Smith Co., York, Pa., titled Power Impulse Turbines, Impulse Turbines and Leonard Trash Rack Rake, illustrate the various products of the company in detailed data and specifications. Blue prints are shown for trash rake installation and turbine machinery is pictorially portrayed.

**History 1912-1945**, of Commercial Credit Co., Baltimore, Md., records the growth of specialized types of commercial banking. The book, substantially bound, and containing 150 pages, contains photographs of events and individuals dating back as far as the initial year of the firm's existence; also tables analyzing receivable purchases from 1912 through 1945.

**Heat Treatment** of aluminum alloys is the subject of a new booklet put out by Reynolds Metals Co., Dept. 47, 2500 S. Third St., Louisville, Ky., at the price of \$1.00 each. The purpose of the book is to provide readily usable information, in simplified form, on thermal treatment for various alloys. The book is 6 by 9 inch, 144 pages, 81 illustrations, 13 tables, 18 photomicrographs and 2 charts.

## Foundry Opens Atlanta Office

The opening of a branch of Lebanon Steel Foundry operations in Atlanta not only reflects the expanding development of the Southern industrial field but carries with it an interesting link with the history of early America.

The branch itself, which is being initially opened as a sales and engineering office, is under the direction of John H. Boyd, formerly of Richmond, Virginia, and is located at 17 Edgewood Ave, Northeast.

Mr. Boyd has been with the Lebanon Steel Foundry since his release from the Army, previously assigned to the engineering sales department in the main office at Lebanon, Pennsylvania. During the war he served with the army in the China-Burma-India theater of operations.

According to W. H. Worrlow, president of the company, the Atlanta office has been established especially to serve the South's swiftly growing requirements in the chemical, citrus fruit, textile, dye, paper and pulp, oil and food processing industries. These industries are demanding ever increasing supplies of corrosion resistant, heat resistant and high strength alloy and steel castings.

The home of the firm is in the historic Lebanon Valley, and the historical aspect builds itself around the Cornwall ore banks which made history during the



John H. Boyd

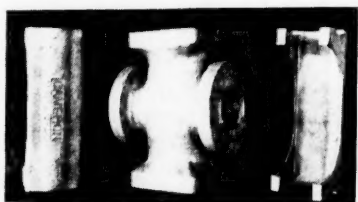
American Revolution. In that period the presently used Lake Region ores were unavailable, and Cornwall's ore was vital to the munitions used by General Washington's army of patriots. The ore was smelted at nearby Elizabeth Furnace.

During the momentous winter of 1776-77, and the critical encampment at Valley Forge, General Washington visited the foundry in search of sorely needed cannon and shot. Upon being told that manpower shortage prevented fulfillment of his needs, the general is said to have promised manpower relief. Shortly thereafter, on Christmas night, he led his troops across the Delaware River, captured several hundred Hessian soldiers in the service of the British, and dispatched most of them to the foundry where they helped to turn out arms for the revolutionary army.

It is interesting to note that these Hessians never returned to Europe, and that many of their descendants are engaged today in producing electric steel castings of intricate design at the Lebanon Steel Foundry, very near to the first American jobs held by their forefathers.

Besides this indirect help by Europe in the matter of manpower, Lebanon can also number another European aid in its development. In 1933 an invitation was extended to the company's officials to visit the plants of Fischer Steel Company of Schaffhausen, Switzerland, recognized throughout Europe for its quality products. This trip resulted in a license for Lebanon from the Fischer firm to observe the Fischer method and to exchange information.

**High pressure blowout prevents body and brackets for capping oil wells.**



## Air Borne Cargo Lines Opens St. Louis Branch Office

Air Borne Cargo Lines, Inc., of New York, has opened a branch office at 498 Arcade Building, St. Louis, Mo., with William R. Bennett, veteran railroad executive in charge. Mr. Bennett played an important part in laying out the first railroad along Lambert Field, St. Louis.

Air Borne Cargo Lines was formerly known as the Hoosier Air Freight Corp. Col. Axel H. Oxholm is general traffic manager. The line operates a fleet of eight DC-3 Douglas freight planes. Service from New York to St. Louis, the western terminus, includes stops at Philadelphia, Baltimore, Cleveland, Toledo and Detroit.

## Equitable Securities Buys Wholesale Hardware Firm

Equitable Securities Corp., investment bankers with headquarters in Nashville, Tenn., and Union Securities Corp., of New York, have purchased the Moore-Handley Hardware Co., Birmingham, Ala. wholesale hardware concern established in 1882.

One of the most important financial transactions this year in the South was recently disclosed in Birmingham when it was announced that the huge Moore-Handley Hardware Company, established in Birmingham in 1882 and now covering a large trading area in the Mid-South, has been purchased by Equitable Securities Corporation, well-known Southern investment bankers with headquarters in Nashville, Tennessee, and Union Securities Corporation of New York City.

Purchase price was not disclosed in the announcement, but informed circles indicated that several million dollars were involved. It was stated, however, that no change was contemplated in the present management or personnel of the Birmingham wholesale hardware firm, of which W. W. French, Sr. has been president for a number of years.

In its 64 years, Moore-Handley Hardware Co. has become one of the nation's leading wholesale hardware houses. Representing many of the nation's outstanding manufacturers, the company distributes all types of hardware, electrical supplies, machinery and mill supplies, building materials, automobile accessories, sporting goods, toys, paints and roofing, in an area which embraces the entire state of Alabama and portions of Florida, Georgia, Tennessee and Mississippi.

(Continued on page 56)



## Equitable Securities Buys Wholesale Hardware Firm

(Continued from page 55)

Gross sales of the concern are expected to total approximately \$20,000,000 in 1946.

Equitable Securities Corp., of which Brownlee O. Currey is president, maintains offices in eight Southern cities and in New York and Hartford. Mr. Currey is a trustee of Southern Research Institute, Birmingham, and a director of many Southern corporations. Other interests of the banking firm include ownership of Southern Agriculturist, Texas Farm & Ranch Publishing Co., publishers of Farm and Ranch and Holland's Magazines, and important holdings in the transit field in Virginia, Tennessee, Louisiana, Texas and other states.

## Delta Inaugurates Non-Stop Chicago-Miami Flights

Delta Air Lines started the first scheduled non-stop flights from Chicago to Miami, November 1, slashing almost 2 hour from Delta's fastest present flights. Delta's big 4-engine, 44-passenger DC-4's will span the 1,311-mile hop in exactly 6 hours southbound, at an average speed of 218 miles per hour. The northbound trip will require 15 minutes longer because of prevailing winds.

The first non-stop from Chicago to Miami will depart daily at 11:30 p.m. (CST), arriving in Miami at 6:30 a.m. (EST). Returning, it will leave Miami at 1:45 a.m. (EST) and arrive in Chicago at 7:00 a.m. (CST).

Another DC-3 flight was added November 1, from Chicago to Savannah, via Cincinnati, Lexington, Knoxville and Atlanta. With the new schedules, Delta will have a total of 8 flights daily south from Chicago, of which 3 are 44-passenger DC-4 flights, including 5 to Miami, 2 to Charleston, S. C., and 1 to Savannah.

Delta inaugurated the first scheduled airline service into Lexington, Ky., October 13. The city's first service was to Cincinnati, Knoxville and Atlanta. On November 1 the service will be doubled and then will include flights to Chicago, Cincinnati, Knoxville, Atlanta and Savannah, and connections to many other cities on the Delta system.

## Georgia Peanut Mill Starts

The South Georgia Peanut & Milling Co. has started operating a new peanut mill in the plant formerly occupied by the Williams Milling Co. at Cordele, Ga. Eight shellers with a daily capacity of 65 to 75 tons of peanuts are among the new equipment installed. Officers of the concern are: J. W. Noble, president; George Mitchell, vice president; N. E. Brown, secretary and treasurer.

## The Awakened Waco

(Continued from page 49)

center of Texas—a crossroads of east-west and north-south traffic in the state. In addition to strategic geographical location, Waco's position is in the exact center of population density in the state.

With a little further research Wacoans found that within a radius of 100 miles of the city was more than 13 percent of the entire population of the Southwest, including Texas, New Mexico, Oklahoma, Arkansas, and Louisiana. The area within a 200-mile radius included 36 percent of this population; 70 percent was contained within a 300-mile radius, and more than 90 percent lived within 400 miles. Thus, while sharing the natural advantages afforded by the state's water and power supply, mild climate, raw materials, and low taxes, Waco found itself in the enviable position of affording for manufacturing industry the most desirable location for distribution of finished products.

This important advantage was the determining factor in the location of Owens-Illinois Glass Company's \$2,000,000 glass container plant which began operation in Waco in January of 1944, and which this year will ship from 5,200 to 6,000 carloads of bottles from Waco.

In the words of George M. Walter, manager of the Waco plant, who directed the plant-site location survey, "It became obvious that distribution and cost of distribution was the most important factor if we were to secure our fair share of the volume in the Southwestern territory . . . Waco shows a very substantial saving in freight . . . its location is such that we can give almost overnight service to the larger centers of population in the territory . . . and there is no question

concerning Waco's substantial advantage over any other locality from the standpoint of distribution and freight costs."

In January of last year General Tire and Rubber Company began the operation of its new \$6,000,000 Waco plant—the first tire manufacturing plant in Texas and the Southwest. The plant was located for economic distribution to the Southwestern and Southern territory its daily production of 900 truck tires and 3,500 passenger car tires.

This year Chlorine Solutions, Inc., convinced of the absurdity of shipping California water over expensive miles of rail in weighty containers to serve a Southwest market, located a branch plant in Waco to manufacture its "Hypro" and "Anti-Chlo" solutions.

Among Waco's larger manufacturers are also Universal Atlas Portland Cement Company, Chase and McGinnis Speedcrete Company, Clifton Manufacturing Company, The Borden Company, Crawford-Austin Manufacturing Company, William Cameron and Company, Texas Textile mills, Hawk and Buck Co., J. M. Wood Manufacturing Company, Waco Garment Manufacturing Company, Douglas Company, J. H. Youngblood and Sons, Bennett and Crews Candy Co., Southwestern Cotton Mills, Texas Coffin Company, Central Texas Iron Works, Swift and Company, Red Arrow Laboratories, and Hammond Laundry-Cleaning Machinery Company.

Products manufactured include cement, tents and awnings, work clothing, sporting goods, coffins and caskets, camp and church furniture, venetian blinds, twine, denim, brooms and mops, laundry and dry cleaning equipment, printing, lithographing, advertising novelties, medicines, toilet preparations, engraving, iron and steel fabrications, bottled drinks, various food items, cotton goods, women's clothing, mattresses, hats, monuments and miscellaneous other items.

A team mate of strategic location in the game of distribution to the Southwest market is Waco's excellent freight transportation service. Five railways maintain 37 freight schedules daily over 10 radiating rail lines. Eight motor truck lines dispatch carriers on 101 daily schedules over nine arterial high-

ways from Waco, and nine additional truck lines maintain as many on-call schedules as business interests require.

In asking themselves what the city had to offer industry, Wacoans also awoke to the fact that in addition to their unequalled advantage of distribution they had a market of proven industrial workers of the highest type; for during the war it was in the Bluebonnet Ordnance plant near Waco that southern labor, long considered comparatively unfit for industrial skills, had first proved itself entirely desirable. Employing during war years 6,000 native laborers whose background was 98 percent agricultural, the plant maintained the highest standard of all bomb-loading plants in the nation for efficient production.

Crawford-Austin in Waco, manufacturers of canvas goods and mattresses, expanded its labor force from 300 to 5,200 during the early part of the war and became one of the group of nine manufacturers in the nation first to receive the Army-Navy "E" award. All labor was reported intelligent and adaptable.

Among other manufacturers who turned in similar reports on the highly-satisfactory calibre of labor was William Cameron and Company, among the six largest wholesale and retail dealers in lumber in the nation, and operators of the largest factory in the Southwest for the production of sash, doors, and built-in furniture.

The impact of the termination of the war on Waco's economy was at first anticipated to be a somewhat stunning blow. Included among military activities in Waco was the operation of two army air fields, built at a combined cost of \$13,500,000 and containing personnel which numbered 9,500.

Contrary to expectations, the city is undergoing an expansion splurge in every phase of activity. Present population is estimated to be more than 90,000 as compared with its 1940 total of 71,000, and the emergency housing committee has estimated the immediate need for 2,000 new residences.

The city has taken over for municipal operation one of the army airfields which was declared surplus, and in addition to the two airlines now serving Waco, 14 airlines

have filed applications to operate flights through the city. Meanwhile realtors, seeking room for expansion, propose to convert the old municipal airport into a residential subdivision.

Construction of the \$30,000,000 Whitney Dam on the Brazos, termed by U. S. Army engineers as the number one postwar public works project in the entire Southwest, will provide industry with additional electric power. Highway planning includes a new super road to accommodate through-city traffic.

Baylor University in Waco, Texas' oldest institution of higher learning, has prepared for an enrollment which is twice the pre-war normal, and a new technical high school has been established to keep abreast of industrial expansion.

An average of 50 new businesses are opening each month, and store fronts are undergoing face-lifting. Interiors are being remodeled.

Even recreational facilities are reflecting the increased activity of the expanding city. Cameron Park's 550 acres, fourth largest municipally-owned park in the nation, seems crowded on week ends.

An awakened Waco is no longer wondering what has become of its agricultural economy. Its location in the Southwest market has destined it to be a center of industry—to carry on its role in manufacturing established by the smithy who one hundred years ago chose the site for the location of his forge and anvil.

### **Southern Contracts Total \$1,663,051,000**

*(Continued from page 53)*

Highway and bridge projects in the contract stage totaling \$32,134,000 occupied second place. Private building ranked third with \$21,053,000; engineering construction with \$20,107,000 and public building occupied low position with its total of \$9,894,000.

Texas was the major contributor to the \$32,134,000 highway total. Total for projects in that state was \$12,813,000. Seven other states contributing substantial amounts were Alabama, \$3,131,000; Florida, \$2,797,000; South Carolina, \$1,902,000; West Virginia, \$1,878,000; Louisiana, \$1,693,000; North Caro-

lina, \$1,657,000; Virginia, \$1,448,000. Total for the District of Columbia was \$2,338,000, making that area fourth on the list.

Private building's \$21,053,000 in November embraced \$15,849,000 for residential construction, \$2,803,000 for commercial structures, \$1,282,000 for assembly buildings such as churches, theatres and auditoriums, and \$1,119,000 for office type buildings. Government buildings valued at \$5,288,000 and schools valued at \$4,606,000 made up the public building figure.

Engineering construction contract valuation, as tabulated by the MANUFACTURERS RECORD included \$12,509,000 for dams, drainage, earth work and airports, \$6,698,000 for sewer and water projects and \$900,000 for governmental electric work. Greater activity in the field of heavy construction is expected as the result of the order raising the figure for such work under the presidential restriction by seventy million dollars.

Relaxation of the curb on heavy construction work done under supervision of various government agencies may be the forerunner of relief from other restrictions from which the construction industry has been suffering for a long period. Shortages of building materials and equipment are expected to disappear gradually with removal of price ceilings.

The Producers Council, national organization of building material and equipment manufacturers, views the reduction of cost of erecting veterans homes as the most pressing immediate problem. "Cost of building has not risen excessively as compared with increases in the cost of other commodities," states Tyler S. Rogers, president of the council, "but the industry must lower its costs."

"The end of price control," Mr. Rogers observed, "means a quick end to the black markets which have been raising construction costs and the faster flow of materials will end the on-site delays which have been increasing the cost of building."

"These savings will more than offset any temporary increases which may occur in the prices of the more scarce building products. In addition, building materials manufacturers and other branches of the in-

*(Continued on page 58)*

# Southern Awards \$1,663,000,000 in Eleven Months

(Continued from page 57)

dustry are working aggressively on other economies which will reduce construction costs still further.

"Manufacturers now will be able to resume full scale production of low cost items which were not produced in sufficient quantities because of inadequate ceiling prices. The greater availability of these items will lower costs. Dimensional coordination which saves time and materials on the job is coming into actual use, progress is being made in the revision of local building codes and distribution of building products is becoming more efficient."

A comparison of current prices of several materials made by the National Gypsum Co. as revealed by Melvin H. Baker, president of that company, seemed to bear out Mr. Rogers' statement. Speaking at the cornerstone ceremony of a \$6,000,-

000 gypsum plant being constructed at Baltimore, Mr. Baker stated that the price of gypsum lath for a five-room house, exclusive of labor mark-up and freight is only \$8.80 higher today than it was in 1936. Plaster for the same house would cost 58 cents more, finished lime, 61 cents more. If wallboard were used, this material for the five-room house would cost the same today as in 1939 and \$17.60 less than in 1936.

The acute labor situation in the construction industry is also seen improving, according to the U. S. Department of Labor, which states that the number of apprentices is continuing to increase. A new all-time high—83,429—were listed in all building trades at the end of October, or 3,410 more than were recorded at the end of September.

Officials of the labor department emphasize that more local joint contractor - labor apprenticeship pro-

grams should be established. They list the apprentices in the various crafts at the end of October as follows: Wood Working, 32,328; electrical, 12,815; pipe trades, 11,650; trowel trades, 10,186; sheet-metal work, 5,940; painting, 6,958; others, 3,642.

Active November projects included:

Pipe line facilities, \$60,000,000, Tennessee Gas and Transmission Co., Texas.

Synthetic yarn plant, \$40,000,000, Celanese Corp of America, Rock Hill, S. C.

Expansion, \$15,000,000, Carbide and Carbon Chemicals Corp., Texas City, Texas.

Copper and tube plant, \$12,000,000, Calumet and Hecla Consolidated Copper Co., Decatur, Ala.

Electric power program, \$12,000,000, Jacksonville, Fla.

Starch and sugar plant, \$10,000,000, Corn Products Refining Co., Corpus Christi, Texas.

Power plant, \$10,000,000, Alabama Power Co., Gadsden, Ala.

Textile plant, \$10,000,000, Springs Cotton Mills Co., Lancaster, S. C.

Telephone improvements, \$3,000,000, Peninsular Telephone Co., Tampa, Fla.

Expansion program, \$1,000,000, Gulf Portland Cement Co., Houston, Texas.

Electric plant, \$750,000, Fort Pierce, Fla.

## Industrial

(Including Private Utilities)

	November, 1946 Contracts Awarded	Contracts to be Awarded	Contracts First Eleven Months 1946
Alabama ...	\$ 418,000	\$ 13,578,000	\$ 13,960,000
Arkansas ...	30,000	144,000	4,784,000
Dist. of Col. ....			2,037,000
Florida ....	940,000	3,896,000	36,511,000
Georgia ....	2,217,000	1,486,000	44,147,000
Kentucky ...	795,000	287,000	1,044,000
Louisiana ...	1,026,000	1,053,000	15,163,000
Maryland ...	260,000	370,000	32,800,000
Mississippi ...	613,000	982,000	30,979,000
Missouri ...	909,000	1,032,000	16,048,000
N. Carolina ...	395,000	1,008,000	12,933,000
Oklahoma ...		700,000	50,000
S. Carolina ...	40,705,000	10,395,000	55,165,000
Tennessee ...	942,000	2,385,000	55,352,000
Texas ....	18,065,000	101,784,000	98,662,000
Virginia ...	300,000	1,888,000	13,309,000
W. Virginia ...	100,000	4,974,000	1,475,000

TOTAL \$67,745,000 \$146,062,000 \$434,479,000

## Private Building

(Assembly, Commercial, Residential, Office)

	November, 1946 Contracts Awarded	Contracts to be Awarded	Contracts First Eleven Months 1946
Alabama ...	\$ 2,142,000	\$ 2,960,000	\$ 18,345,000
Arkansas ...		30,000	551,000
Dist. of Col. ....			370,000
Florida ....	5,472,000	3,330,000	89,953,000
Georgia ....	1,736,000	1,024,000	30,980,000
Kentucky ...		4,116,000	850,000
Louisiana ...	1,693,000	1,389,000	18,065,000
Maryland ...	3,454,000	324,000	50,815,000
Mississippi ...	214,000	1,085,000	10,552,000
Missouri ...	690,000	865,000	8,077,000
N. Carolina ...	20,000	622,000	8,175,000
Oklahoma ...		620,000	438,000
S. Carolina ...		778,000	2,821,000
Tennessee ...	235,000	500,000	7,655,000
Texas ....	5,487,000	4,792,000	133,662,000
Virginia ...		555,000	2,372,000
W. Virginia ...		100,000	360,000

TOTAL \$21,053,000 \$23,060,000 \$383,741,000

## Roads, Streets, Bridges

	November, 1946 Contracts Awarded	Contracts to be Awarded	Contracts First Eleven Months 1946
Alabama ...	\$ 3,131,000	\$ 1,566,000	\$ 14,257,000
Arkansas ...	411,000	219,000	5,763,000
Dist. of Col. ....	2,358,000		6,169,000
Florida ....	2,797,000	9,199,000	20,456,000
Georgia ....		250,000	23,613,000
Kentucky ...	601,000	521,000	15,215,000
Louisiana ...	1,693,000	1,120,000	16,163,000
Maryland ...	851,000	1,320,000	18,119,000
Mississippi ...	423,000	560,000	10,813,000
Missouri ...	191,000	3,281,000	16,467,000
N. Carolina ...	1,657,000	4,367,000	26,784,000
Oklahoma ...		55,000	12,641,000
S. Carolina ...	1,902,000	380,000	26,333,000
Tennessee ...		2,750,000	14,670,000
Texas ....	12,813,000	10,353,000	85,631,000
Virginia ...	1,448,000	3,240,000	15,370,000
W. Virginia ...	1,878,000	200,000	10,256,000

TOTAL \$32,134,000 \$39,301,000 \$338,720,000

## Public Engineering

(Dams, Drainage, Waterworks, Sewers, etc.)

	November, 1946 Contracts Awarded	Contracts to be Awarded	Contracts First Eleven Months 1946
Alabama ...	\$ 661,000	\$ 270,000	\$ 4,792,000
Arkansas ...	50,000	375,000	31,658,000
Dist. of Col. ....		897,000	2,890,000
Florida ....	2,144,000	17,616,000	19,760,000
Georgia ....	674,000	1,035,000	18,129,000
Kentucky ...		4,009,000	20,504,000
Louisiana ...	715,000	4,406,000	17,886,000
Maryland ...	296,000	11,799,000	17,433,000
Mississippi ...	294,000	2,342,000	5,133,000
Missouri ...	753,000	3,573,000	4,901,000
N. Carolina ...	572,000	3,063,000	8,395,000
Oklahoma ...		502,000	30,809,000
S. Carolina ...	8,084,000	1,294,000	13,855,000
Tennessee ...	590,000	1,516,000	4,382,000
Texas ....	4,413,000	29,336,000	55,794,000
Virginia ...	244,000	1,181,000	6,489,000
W. Virginia ...	17,000	4,179,000	747,000

TOTAL \$20,107,000 \$87,903,000 \$263,557,000

## Public Building

(City, County, Federal; Housing; Schools)

	November, 1946 Contracts Awarded	Contracts to be Awarded	Contracts First Eleven Months 1946
Alabama ...	\$1,086,000	\$ 8,558,000	\$ 16,906,000
Arkansas ...		80,000	1,738,000
Dist. of Col. ....	2,392,000	285,000	6,643,000
Florida ....	233,000	19,262,000	17,063,000
Georgia ....	627,000	20,803,000	13,251,000
Kentucky ...		800,000	5,978,000
Louisiana ...	203,000	1,315,000	14,475,000
Maryland ...	44,000	18,823,000	22,788,000
Mississippi ...	358,000	14,181,000	4,868,000
Missouri ...	89,000	14,411,000	2,206,000
N. Carolina ...	332,000	21,684,000	15,367,000
Oklahoma ...		394,000	1,845,000
S. Carolina ...	148,000	1,315,000	23,894,000
Tennessee ...	1,322,000	8,019,000	15,492,000
Texas ....	1,913,000	32,118,000	58,219,000
Virginia ...	731,000	6,349,000	18,117,000
W. Virginia ...		1,100,000	667,000

TOTAL \$9,894,000 \$171,857,000 \$242,554,000



Garage, \$685,000, Speedway Realty Co., St. Louis, Mo.

Mill addition, \$600,000, Gulf States Paper Corp., Tuscaloosa, Ala.

Thread mills, \$500,000, Clark Thread Co., Albany and Thomasville, Ga.

Pipe plant, \$500,000, Texas Vitrified Pipe Co., Mineral Wells, Texas.

Grain elevator, \$500,000, Indiana Grain Cooperative, Inc., Louisville, Ky.

Maintenance shop, \$435,000, San Antonio Transit Co., San Antonio, Texas.

Telephone improvements, \$400,000, Southern Bell Telephone & Telegraph Co., Burlington, N. C.

Central exchange, \$370,000, Chesapeake & Potomac Telephone Co., Suffolk, Va.

Drumming building, \$357,600, Ethyl Corp., Baton Rouge, La.

Factory, \$350,000, National Battery Co., Memphis, Tenn.

Bus garage, \$300,000, Atlantic Greyhound Bus Lines, Atlanta, Ga.

Warehouse and office, \$300,000, Pittsburg Plate Glass Co., Atlanta, Ga.

Redrying plant, \$300,000, Mountain Burley Tobacco Co., Asheville, N. C.

Drug and chemical plant, \$295,000, Merck & Co., Elkton, Va.

Foundry, \$275,000, Columbian Iron Works, Chattanooga, Tenn.

Telephone building, \$250,000, Two States Telephone Co., Texarkana, Texas.

Warehouse, \$250,000, Thomas H. Sullivan, Houston, Texas.

Concrete block plant, \$250,000, Joseph M. Ripley, Jacksonville, Fla.

Fueling and servicing facilities, \$248,700, Texas & Pacific Railroad, Dallas, Texas.

Mining facilities, \$245,000, Texas Gulf Sulphur Co., Moss Bluff, Texas.

Carbon black plant addition, \$240,000, General Tire & Rubber Co., Baytown, Texas.

Cold storage plant, \$240,900, William E. Spink, Independence, Mo.

Liquefied petroleum plant, \$225,000, Central Kentucky Natural Gas Co., Lexington, Ky.

Natural gas system, \$225,000, Ripley, Miss.

Petroleum storage plant, \$225,000, Gulf Oil Co., Spartanburg, S. C.

Expansion, \$225,000, Dixie Tank and Bridge Co., Memphis, Tenn.

Mill addition, \$220,000, Strasburg Silk Mills, Strasburg, Va.

Garment building, \$204,000, Rice-Stix Co., Water Valley, Miss.

Garment factory, \$200,000, Cotton Blossom Brands, Walhalla, S. C.

Plant addition, \$188,000, B. F. Goodrich Chemical Co., Louisville, Ky.

Plant addition, \$180,000, Monsanto Chemical Co., St. Louis, Mo.

Warehouse and office, \$180,000, Associates Investments, Inc., Atlanta, Ga.

Bus station, \$177,500, Atlantic Greyhound Bus Lines, Brunswick, Ga.

Plant addition, \$175,000, Tennessee Paper Mills, Chattanooga, Tenn.

Warehouse, \$125,000, Atlanta Oak Flooring Co., Atlanta, Ga.

Shirt factory, \$125,000, Garver Manufacturing Co., Wilmington, N. C.

Mill addition, \$120,000, King Manufacturing Co., Augusta, Ga.

Factory, \$120,000, Miller Pro-

ducts Co., Corsicana, Texas.

Manufacturing building, \$115,000, Draper Corp., Spartanburg, S. C.

Natural gas system, \$110,000, Holly Springs, Miss.

Cheese plant, \$103,500, Wilson & Co., Murfreesboro, Tenn.

Warehouse, \$100,000, Leonard Brothers, Fort Worth, Texas.

Refinery improvement, \$100,000, Ashland Oil & Refining Co., Ashland, Ky.

Poultry processing plant, \$100,000, Arkansas Farm Bureau Poultry Cooperative, Bentonville, Ark.

Plant, \$100,000, Rose City Press, Inc., Charleston, W. Va.

Pasteurizing plant, \$100,000, Birmingham Milk Producers Corp., Birmingham, Ala.

Saw mill, Tremont Lumber Co., Menefee, La.

Plant building, Commercial Solvents Corp., Sterlington, La.

Nuclear power plant, Manhattan Project, Oak Ridge, Tenn.

## \$11,000,000 Paper Board Plant Described

(Continued from page 51)

delivered to sorting conveyors for the cleaning and rejection process. Clean wood will be sent to two 88-inch, ten knife chippers, and from there will move through small storage and feeder bins to a belt conveyor, and thence to ground storage chip bins. Bark and sawdust from yard and wood room operations will be conveyed to hog and then delivered to bark burning boiler.

### Digesters

Six welded steel digesters will be used for cooking the chips. Each will have a capacity of over ten tons of pulp for charge. Any of these digesters can deliver into either of two blow tanks, thus two classes of cooks with separate woods can be made simultaneously.

### Wash Room

Two lines of vacuum type washers will be installed for de-liquoring of the pulp. One line will consist of four 8-foot by 14-foot washers for removal of liquor from quick cook or base stock requirements. The second line will consist of three 8-foot by 12-foot washers for treatment of long cook and hardwoods. Vibrating type pre-knotters are being placed ahead of the washers in order to improve the mat formed on the cylinders, with resulting economy in washing. The rejected knots will be taken by gravity through a small jordan for breaking up and return through the system; any further rejects

ultimately coming out with the tailings from the screens.

The final washed stock will be brought by gravity into two separate concrete storage chests, each of 15-ton capacity, equipped with propeller type agitators. While the operating floor of the wash room is to be bricked in and conditioned, canopy construction will be used for the underlying walls.

### Screen Room

Two classes of stock from the two washed stock storage chests will be pumped through independent mix tanks, volume meters and consistency regulators to a flow box feeding seven centrifugal screens, arranged so that as many screens as are desired may be apportioned to either stock, with one screen common to the tailings from both.

The final rejects and tailings from these centrifugal screens will flow by gravity through a thickener into a small surge chest. They will then be pumped through refiners into the base liner washed stock chest for recirculation.

The accepted stock from the centrifugal screens will flow by gravity to three 8 by 12-foot vacuum deckers, two of which will thicken the stock for the base liner and deliver by gravity into a screened stock storage chest of 20-ton capacity. The third thickener will be used in conjunction with the second line of washers and screens for delivery into a separate chest, also of 20-ton capacity.

(Continued on page 60)

# \$11,000,000 Savannah Paper Board Plant Described

(Continued from page 59)

## Refining

Fourteen jordsans with 400-horsepower motors are to be installed for the final preparation of the stock. Eight of these jordsans will normally be used for hydrating the base stock; three for the secondary stock; they will discharge into concrete storage chests, from which their contents will be pumped through finishing jordsans, with two on base stock, one on secondary.

## Paper Machines

The paper machine to be installed initially will be a 236 inch high speed Fourdrinier kraft liner board unit arranged for speeds up to 1,600 feet a minute. The 3-pass flow box will be of streamlined design, with 120-inch slice.

The Fourdrinier section will be suitable for a wire 120 feet long and 236 inches wide, arranged for installing a wire from the tending aisle without necessity of removing the Fourdrinier proper.

The breast roll will be 28 inches in diameter; table rolls, 10½ inches; ten 12-inch suction boxes and a special double box, suction couch roll 44 inches in diameter, having one suction box 7 inches wide and the other 12 inches. Included is a secondary box unit for applying a top film of stock to the base sheet, also a duplex shake with two units.

For the press part there will be two sections, each with a rubber covered upper roll 30 inches in diameter, and a rubber covered lower roll of the suction type 36 inches in diameter, all connected with a pneumatic type loading system to properly distribute weight on the bottom rolls as desired.

The dryer part will be arranged in four sections with twenty 60-inch dryers in each; six 60-inch felt dryers in the first two sections and two similar in the third and fourth; and all journals will be of extra heavy duty, self-aligning rollers.

The driving train will be of the fully enclosed type with all dryers in the lower tier of each section horizontally connected together by intermediate idler gears which, in turn, drive the upper dryers by means of idler pinions, all arranged for lubrication by a central oil lubricating system.

Following the dryers there will be two stacks of calenders having eight rolls each, with pneumatic type loading system for applying pressure to the journals at the top of the roll. The first stack will be arranged for two water boxes.

Between the two calender stacks there will be three 60-inch diameter calender dryers. The reel will be of the uniform speed type with 42-inch driving drum and six reeling drums.

For the final rolls, a two-drum, uniform speed winder suitable for taking rolls up to 72 inches in diameter will be provided, of the latest type with anti-friction bearings throughout and balanced for speeds up to four thousand feet per minute.

White water recovered from the paper

machine and not recirculated will be returned to the screen room ahead of the pulp thickeners. Broke from the paper machine will be conveyed to a breaker beater with 64-inch roll for the returned as pulp to the base liner machine chest.

The machine room building itself, including its extension for roll finishing, will be 630 feet long and 70 feet wide. While it will be built to house a single machine initially, it is so designed that it can be readily expanded for a second machine.

Rolls coming off the end of the paper machine will be banded and passed in echelon over a floor scale somewhat wider than the full width of the paper machine. From the scales, the rolls will pass onto a 12-ton elevator, with 24-foot by 10-foot platform, for delivery to the basement and into roll storage by tiering lift trucks.

## Roll Handling

As a continuation from the machine room and the machine shop toward the river, a roll storage building with a capacity for ten thousand tons will be constructed. This building will be 460 feet long on the side paralleling a servicing railroad track in a train shed, and 220 feet wide, with the river end fronting a dock which will be built for a channel depth of 32 feet to take care of deep water shipments down the Savannah River and its terminals.

## Recovery of Chemicals

Black liquor recovered from the washing operation is to be stored in two tanks, 30-feet diameter by 32-feet high, and pumped continuously to a sextuplet long tube black liquor evaporator. There will be two recovery boiler units, each having a capacity for burning 650,000 pounds of solids per day and generating steam at 625 psi, 700 degrees, to tie in with that generated by the main boiler plant. The hot waste gases from the recovery boilers, after passing through the Cascade evaporators, will go through four Cottrell electrical precipitators before entering the stack for the recovery of soda that would normally be carried off in these gases.

Black liquor soap removed at relatively low concentration from the foam tanks of the black liquor washing operations will be taken off and combined with the feed to the sextuplet steam evaporator and then removed again between the effects of this unit for delivery to a skimming tank where the final soap will be skimmed off and stored for shipment, the excess remaining liquor returning to the evaporators. Make-up salt cake requirements will be handled by a pneumatic system from railroad cars into storage and the salt cake mixing tanks where it will be combined with black liquor for feeding into the recovery units.

The chemicals reduced by the recovery units are delivered in the form of molten smelt into dissolving tanks where they are mixed with recovered weak liquor from the subsequent recausticizing operation required to form green liquor. The

milk of lime from the slaker is to be pumped up to elevated causticizing tanks, 12-foot diameter by 10-foot high, arranged in series and discharging by gravity into a tray type white liquor clarifier, 35-foot diameter by 24-foot high.

Settled mud from the white liquor clarifier will be further washed in a tray type thickener, 35-foot by 24-foot, for recovery of chemicals and the final resulting sludge delivered into a lime mud storage tank, 20-foot by 20-foot. The small amount of fresh make-up lime required to replace that lost in the relatively closed system will be handled from railroad cars into a storage tank by pneumatic handling system.

## Power Plant

The power plant is to be divided into three units: boiler room, turbine room, and recovery room. The boiler room will have two oil fired integral furnace power boilers, each approximately 1500 horsepower. The third boiler will be a duplicate of the two power boilers but with the addition of a Hofft furnace for burning bark and sawdust. This third boiler will be capable of developing the same amount of steam as the power boilers when using oil alone or firing with a combination of oil and wood refuse.

The boilers will operate with steam at the superheater outlet of 625 pounds per square inch pressure and 700 degrees Fahrenheit total temperature, with a feed water temperature of 230 degrees Fahrenheit. Provision has been made for the installation of a fly ash eliminator for the wood refuse burning boiler between the air heater and the induced draft fan.

The burners on all boilers will be of the dual type so designed as to burn either oil or powdered coal. Oil, is to be used initially. All boilers, together with the recovery unit, will discharge their gases into a radial brick stack 250-ft. high and 14-ft. diameter at the top.

In the turbine room there will be installed one 6000 kw. turbo generator of the extracting non-condensing type. Steam will be automatically extracted at 150 psi and exhausted at 50 psi. The second turbine of the same capacity, but of the extracting condensing type, will be installed. Steam will be extracted at 50 psi and exhausted to a surface condenser at 27½ inch mercury. These turbines will operate in parallel on the electric end and are designed for 600 psi—675 degrees F TT steam at the throttle of each. The condenser will be of the surface type, two-pass and with divided water boxes, and will have a total surface of 7500 square feet.

## Electrical Distribution

For the 21,000 horsepower motor capacity, the electrical distribution will be in two voltage level classes. The first or primary system will be 4160 volts, 3 phase, 3 wire, 60 cycle, supplied by the two 6000 kw. turbine driven generators. It will serve direct, motors rated 200 hp. and larger as well as a number of unit type of

substations. The second, or secondary, system will be 480 volts, 3 phase, 60 cycle, supplied by the unit type substations. It will serve motors rated 150 horsepower and smaller, as well as form the primary distribution system for building lighting.

Fluorescent lighting will be installed in areas where conditions permit; otherwise incandescent lighting will be used. The lighting distribution will be 480 volts primary, stepped down to 120/240 volts with small transformers conveniently placed in the manufacturing buildings, and arranged for sub-divided control limited to relatively small areas. In addition to the general lighting system, there will be a "pilot light" system, or "Night Watchman Light" system, controlled from the turbine room which will be for use not only during the non-operating hours of the plant but for emergency lighting in case something should happen to take the turbo generators off the system.

### Water Supply

Water for the process requirements in the mill is to be delivered through a 20-inch line at about 50-foot head from the new filter plant now under construction by the Savannah industrial and domestic water supply system. Part of this water will be taken initially through the surface condenser of the turbine and then boosted to higher pressures for mill requirements. As this water will be potable, drinking facilities will be provided from the same source in an independent line.

To furnish water for fire protection, evaporator condenser, cleaning of wood, wash-ups, etc., where clean water is not necessarily required a separate pump house is to be built to take water from the Savannah River in which there will be two 1000 gpm. fire pumps and two 5000 gpm. pumps for the mill requirements. Waste disposal for the mill will be carried off in two main trunk sewers to the Savannah River. A 100,000-gallon elevated water tank is to be provided for the underground loop system of mains in conjunction with the fire pumps.

### General Facilities

The main office building will contain some 10,000 square feet of floor area and is to be fully air conditioned and treated architecturally in the Williamsburg style. Parking space for employees' cars, and buses will be provided close to the office. Liberal locker, wash, and rest rooms, will be provided at strategic points within the mill, as are air conditioned offices for the mill supervisory forces. A fully equipped laboratory, also air conditioned, will be located at the center of the mill.

General contract for the construction of the mill has been awarded to the Daniel Construction Co., of Greenville, S. C. Representing this company on the ground will be James Rice, as Project Manager. Sub-contracts have been awarded to Raymond Concrete Pile Co.; Midwest Piping Co.; and the Rollison Engineering Co. (electrical sub-contract).

The Southern Paperboard Corp., is a subsidiary of Robert Gair Co., Inc., with George E. Dyke, president of the latter

chairman of the paperboard concern's board. Ernest Rossiter is president; T. Raymond Pierce and T. W. Earle, vice presidents; E. O. Sommer, comptroller; E. Meyer, treasurer; W. F. Howell, secretary; William Bergman, assistant comptroller; A. J. Bauser, assistant treasurer and R. B. Trotman, assistant secretary.

Procurement of wood and management of the woodlands acquired for Southern Paperboard Corporation's operations will be handled by Gair Woodlands Corp., under direction of T. W. Earle, president. Roland Wilber has been appointed manager of manufacturing at the new plant; H. W. Borman, assistant to the president; Charles Mason, personnel manager.

J. E. Sirrine & Co., engineers of Greenville, S. C., have been responsible from the inception of the project for preparation of all reports, selection of equipment, design and detailing of final plans, under the direction of D. G. Moon, head of the pulp and paper mill division, with the supervision of the active construction in charge of J. W. Cantrell as resident engineer.

A partial list of the equipment and material vendors follows:

Log and Chin Conveyors—Chain Belt Co., Augusta Iron Works.  
 Weightometer—Merrick Scale Manufacturing Co.  
 Drum Barkers, Digester Blow Down System, Turpentine Condenser—Fibre Making Processes, Inc.  
 Chippers—D. J. Murray Manufacturing Co.  
 Re-Chippers—Waterville Iron Works.  
 Chip Screen—Allis-Chalmers Manufacturing Co.  
 Hog for Refuse—Diamond Iron Works, Inc.  
 Knife Grinder—Bridgeport Safety Emery Wheel Co.  
 Locomotive Crane—Ohio Locomotive Crane Co.  
 Truck Crane (Link-Belt)—Bell Lott Road Machinery Co.  
 Digesters—Chicago Bridge & Iron Co.  
 Blow Valves—Yarnall-Waring Co.  
 Blow and Storage Tanks—Ingalls Iron Works.  
 Black Liquor Washers, Thickeners, Foam Breakers, Knotters, Centrifugal Screens, Agitators—Improved Paper Machinery Corp.  
 Elevators—Monarch Elevator & Machinery Co.  
 Knot Grinder—Noble & Wood Machine Co.  
 Screenings Refiner—Sprout, Waldron & Co.  
 Speed Reducers—The Falk Corp.  
 Liquid Alum Tanks—O. G. Kelley & Co.  
 Jordans—E. D. Jones & Sons Co.  
 Broke Beater—Shartle Brothers Machine Co.  
 Consistency Regulators—DeZurik Shower Co.  
 Paper Machine—Pusey & Jones Corp.  
 Paper Machine Drive—General Electric Co.  
 Hoods and Fans—J. O. Ross Engineering Corp.  
 Vacuum Pumps—Nash Engineering Co.  
 Condensate Return System—Midwest-Fulton Machine Co.  
 Fan Pumps—Ingersoll-Rand Co.  
 Stock, Liquor, and Water Pumps—Ingersoll-Rand Co., Worthington Pump & Machinery Corp., Morris Machine Works, The LaBour Company, Inc.  
 Felt Conditioning—Bird Machine Co.  
 Scales—Fairbanks, Morse & Co.  
 Rewinder—Cameron Machine Co.  
 Roll Grinder—Lobell Co.  
 Cranes—Northern Engineering Works, Manning, Maxwell & Moore.  
 Evaporators—General American Process Equipment Co.  
 Recovery Boilers, Refuse, Boilers, and Oil Burning Boilers—Combustion Engineering Co.  
 Bark Stoker & Bin—The Hoff Company, Inc.  
 Precipitators—Research Corp.  
 Salt Cake and Lime Handling Equipment—The Brady Conveyors Corp.  
 Causticizing System—The Dorr Co.  
 Lime Kiln—Traylor Engineering & Manufacturing Co.  
 Alum Pumps—Wilfley Pump Co.  
 Soap Pumps—Viking Pump Co.  
 Stack—Alphons Custodis Chimney Construction Co.  
 Feed Water Pumps—Goulds Pumps, Inc.  
 Feed Water Heater—Elliott Co.

Mill Compressors—Sullivan Machinery Co.  
 Recovery "Puff" System Compressors—Worthington Pump & Machinery Corp.  
 Fire Pumps—Worthington Pump & Machinery Corp.  
 Water Intake Screen—Link-Belt Co.  
 Steam Turbine, Condenser, Motors and Controls—Westinghouse Electric Corp.  
 Main Switchgear and Transformers—General Electric Co.  
 Elevated Water Tanks—Chicago Bridge & Iron Co.  
 Piping—Midwest Piping & Supply Co.  
 Structural Steel—Ingalls Iron Works.  
 Conveyor Belting—B. F. Goodrich Co.  
 Refractories—Harbison-Walker.  
 Roll Covering—U. S. Rubber Co.  
 Steel Sheet Piling—Tennessee Coal, Iron & Railroad Co.  
 Sash—Detroit Steel Products Co.  
 Paint—Earl Paint Co.  
 Reinforcing—Hall Steel Co.  
 Cement—Atlas Portland Cement Co.  
 Roofing, Tile—Poreto Manufacturing Co.  
 Fencing—Cyclone Fence Co.

## Foreign Trade Zone

(Continued from page 50)

ulated in a Foreign Trade Zone without payment of duty. It is particularly valuable for expediting and encouraging trans-shipment and re-export trade because of the freedom foreign merchandise enjoys while in the Zone.

The free port idea is a thousand years old, and was widely used by the Hanseatic League in the 14th century when its membership extended from towns in Italy through central Europe to Scandinavia and beyond to Russia. The idea—changed to foreign trade zones rather than entire ports—was revived in Germany toward the end of the last century, and its outstanding success won it followers in Denmark, Italy, Sweden, Poland and other countries.

"With the establishment of a foreign trade zone, the port of New Orleans, with its modern facilities, efficient operation and low-cost inland water rates, is now in a position to offer importers, manufacturers and ship owners, advantages available nowhere else in the United States," R. L. Simpson, president of the Board of Port Commissioners, said.

Under the jurisdiction of the Board of Port Commissioners which celebrated its 50th anniversary November 18, the port of New Orleans has shown constant progress and expansion. During the past half-century greater improvements were accomplished than in any period of the port's 228-year history beginning in 1718.

Since its formation in 1896, the board, an agency of the State of Louisiana, has constructed a port plant estimated to be worth over

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## Foreign Trade Zone

(Continued from page 61)

\$75,000,000. These facilities include over seven and one-half miles of modern quay-type wharves and steel transit sheds, a public grain elevator with a capacity of 2,600,000 bushels and a 500,000 bale capacity public cotton warehouse.

The Board has also built an inner harbor navigational canal at a cost of \$23,000,000. This has provided water-front sites for many large industrial plants. The port authority, which consists of five non-paid commissioners, has complete jurisdiction over the port's operations and facilities.

When the Board of Port Commissioners was authorized under an act of the State Legislature, the port's facilities, which were then operated by private lessees, were hardly more than rough piers at the mercy of the elements and hard usage. Because the wharves were leased under a 10-year contract to expire in June, 1901, the Board was unable to assume full authority until that date.

However, in 1904 a \$2,000,000 bond issue was approved and by 1910, concrete wharves had replaced the former wooden piers, and steel sheds gave protection to valuable cargoes. The grain elevator was built in 1916; the cotton warehouse in 1919; the coal tipple and the bulk commodity handling plant in 1921.

Still later the Board's facilities gradually included banana conveyors, coffee terminals, closed sheds, locomotive cranes for unloading barges, dredges, floating derricks, electric trucks, jacks, a vegetable oil pumping plant, and modern fire protection equipment which includes a fire sprinkler system throughout all facilities, and the fire tug "Deluge," one of the most powerful in the world.

The biggest single project undertaken by the Board of Port Commissioners was the building of the inner harbor navigation canal begun during World War I and formally opened in May 1923.

Innovations under the direction of the Board have attracted attention throughout the Western world and many port cities have sent representatives to study the system of public port ownership in practice.

The board presently has planned

more than \$13,000,000 in projects for the improvements of the port's facilities for the future. They include a freight airport at an estimated cost of \$1,525,000, reconstruction of present wharves \$3,561,000, new roadways and approaches to wharves \$450,000, new wharf construction \$4,800,000, dredging \$850,000, a bulk commodity plant \$1,100,000 and a large modern cold-storage and liquid handling plant.

Another vital project planned is the new tide water ship channel to the Gulf which already has been tentatively approved by the U. S. Army Engineers. It will shorten the distance from the port to the sea by approximately 60 miles and open additional large areas for industrial expansion.

Statistically, the port of New Orleans has continued to maintain its position as "Second Port USA." It is second in value of imports, export car unloadings, internal shipments, coffee imports and general cargo. It

ranks first in banana, sugar and molasses imports and was first in efficiency among Army ports of embarkation during the war. The port also was first in balance between exports and imports in shipping weight and dollar volume. This data is from reports of the U. S. Army Engineers and the Department of Commerce.

The New Orleans Board of Port Commissioners were also active in the formation and organization of the now well-known International House and the International Trade Mart which are taking an increasing part in the further expansion of the world's commerce through the port gateway of the Mississippi Valley.

The Board's golden anniversary was celebrated as part of the International Week program November 14-19 which brought dignitaries and notables from throughout the world to participate in these activities in the Crescent City.

## Baltimore Gypsum Plant

(Continued from page 46)

use in the National plant at the rate of 200-tons an hour.

Gypsum wallboard will be produced at the new Baltimore plant. According to Mr. Baker, the machines now confined almost exclusively to wallboard production to meet the current need for home construction, also produce lath as a base for plastering and sheathing for the exterior.

A mill building, board plant, power house and office, employees service building and maintenance shop and garage will make up the major part of the gypsum plant. The mill building will be 88 by 440 feet and have the machinery to manufacture all kinds of gypsum plaster at the rate of 90-tons an hour. This will be from rock brought from Nova Scotia ranging from 6-inch lumps to fines. The 100 by 775-foot board plant will house the board producing machines which will extend approximately the entire length of the buildings, 40-foot wide second floor. Gypsum board will come off of this machine at about 120-feet a minute. The board will be transferred to a dryer and afterwards moved down a well to the first

floor storage. The power plant will generate steam at the rate of 60,000 pounds per square inch. New storage capacity at the plant will be 60,000-tons making this a total of 120,000-tons. This will approximate a six months supply. Water in the Nova Scotia area freezes during the winter months, thus making the large storage capacity a necessity to insure an ample supply of raw materials at all times.

The new plant will supply a market reaching into Maryland, Delaware, Pennsylvania, West Virginia and Virginia. It is one of 24 plants in 16 states and the Dominion of Canada. The start of operations which may be toward the later part of next year will mean addition of \$600,000 to the already large industrial payroll total in the Baltimore area.

Mr. Baker observed that building costs during periods after our major wars have risen from 50 to 75 per cent due to material shortages, wage increases granted to end strikes and general inflationary forces. "In each case," he said, "the increase was held at the peak for a short time and then receded some-

what to stabilize at a level of around 40 to 50 per cent above pre-war costs.

"Each of these periods of postwar unrest was, in turn, followed by periods of prosperity that brought with them higher standards of living for Americans—new industries and greater wealth. Most important of all, each was followed by a building boom that spearheaded the nation's recovery and at the same time formed the basis for a higher economy.

"Every new home built means new furniture; new appliances such as refrigerators and kitchen ranges and radios; new linens, bedding, bathroom appliances; in effect a new and higher standard of living for the family that buys it. Looked at in this sense, the building industry represents more than 20 per cent of the national economy. Therefore, it affects every man, woman and child in this country."

Generally, Mr. Baker declared, the same factors currently limiting industrial production are delaying the building industry. These he listed as the shortages of key materials, work stoppages due to strikes and high costs that make ethical builders lose confidence in their product, at the same time pointing out that they are the same factors that have temporarily held back the building booms following wars of the past.

Going into the past, Mr. Baker compared today's gypsum product prices with those in effect in 1936. He said the price of gypsum lath for a five-room house, exclusive of dealers mark-up and freight, is only \$8.80 higher today than it was in 1936. Plaster for the same house costs 58 cents more today than ten years ago.

Finish lime for the five-room dwelling would cost 61 cents more today than in 1936. If dry-wall construction were used, the increases would not enter the cost. Wallboard for the house would cost the same today as in 1939 and \$17.60 less than would have been paid in 1936. A greatly improved gypsum sheathing would cost \$5.00 more than 1936. Rock wool, also much improved, would cost the same as in 1939 but \$29.20 less than in 1936.

Taking the position that allocations of materials under government control and ceilings on rent and sell-

ing prices have made private construction difficult and costly, Mr. Baker urged bureaucracy to get out of the way so both veterans and others can get the houses so badly needed. "Reasonable men," he said, "are expecting a 'breather' from the furious pace of war production during which industry and national economy will shake down to a more efficient peacetime pace."

Making what he called a few observations of general interest about the future, Mr. Baker said:

"Many people today are pessimistic about the future. They are disheartened at the outlook presented by the waves of strikes in this country—the continued demands for higher wages and the resulting higher costs—the recurring threats of a new war that would expose great cities such as Baltimore to atomic destruction.

"There has been nothing wrong with the American economic system except distortions produced by group greed and group privilege. If the election of a new Congress doesn't result immediately in repeal of existing legislation of the leftist type, the mere fact that such a threat is in the offing will have a sobering effect on those who would start further industrial strife.

"Business wants to pay good wages and wants to see a higher standard of living and a widespread distribution of purchasing power, but it cannot spend more than it can take in. When one group—the labor group—assumes that it can ask anything it wishes and require management to find the way to pay it, that could quickly destroy the American economic system. For the meshing of economic factors into a pattern of prosperity depends not on legislation but on voluntary cooperation by both labor and management.

"We are optimistic, as our investments in expansion indicates. And we feel there is good basis for our optimism."

Baltimore Contractors, Inc., is the contractor and Hall, Turpin & Wachter are the engineers for both the municipal project and the new gypsum plant. This engineering firm comprised of Lincoln N. Hall who handles the architectural matters and Owen W. Turpin and Frank C. Wachter, consulting engineers, has also done the engineering work for National Gypsum expansions at Ro-

tan, Texas; Savannah, Ga.; Alexandria, Ind.; Darien Center, N. Y.; Dover, N. J., and Bronx, N. Y. Western Electric Co., Locke Insulator Co., Chemical & Pigment Co., and Southern States Cooperative, Inc., are other organizations by whom the firm has been engaged. (S.A.L.)

## Aluminum Fabrication

(Continued from page 43)

tion with engineers of the Aluminum Company of America.

The R. D. Cole Co., Newnan, Ga., one of the nation's largest tank manufacturers, after installing an aluminum roof on a 500,000 gallon water tank for the city of Macon, Ga., now has in production smaller all-aluminum water tanks. The company also has constructed tanks of aluminum for chemicals.

"Every day we get calls from manufacturers entering the aluminum field," said J. Harvey Irwin, district sales manager for ALCOA in Atlanta. "We have many of them come to us with their ideas and plans to enter the aluminum manufacturing field. Our engineers are ready with technical advice on alloys and methods of forming and joining aluminum.

"Fabrication of this metal in the South is expanding rapidly, particularly in the architectural field. There are now a number of manufacturers of aluminum windows, hand rails, grilles and other applications, and others are going into production."

Manufacturers in the South in the aluminum field include the Southern Coach Co., Evergreen, Ala., making aluminum bodies for buses; Consolidated Vultee at Nashville, Tenn., has converted from airplane manufacture to bus bodies and aluminum home appliances.

Tennessee Aircraft, Inc., of Nashville, after producing aluminum toys and leaf rakes has returned to the manufacture of sub-assemblies for a large aircraft corporation.

The Enterprise Aluminum Co., Eatonton, Ga., is producing cooking utensils, and Southeastern Metals Co., Decatur, Ala., is producing aluminum cooking utensils and Boy Scout equipment.

The Rite Equipment Co., Mobile, Ala., is building an aluminum pulpwood loading machine, designed to

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## Aluminum Fabrication

(Continued from page 63)

speed up and reduce labor in handling of this vital material.

There are growing numbers of aluminum fabricators in the South today, many of them in the smaller class and their products include pleasure boats, corn stick pans, furniture, awnings, printers' buggies, lawn sprinklers and a lot of other items, chosen from the more than 3500 uses for aluminum today.

## Textile Expansion

(Continued from page 45)

of dyeing and finishing facilities. Diversification is leading off at tangents to production of fabrics items, such as lingerie, pajamas and miscellaneous specialties.

While the economic importance of American knitting is well understood, the industry may be described as a "mystery in finance," insofar as its true worth is concerned. Likely, any dependable estimate of the capital invested would be astonishingly high in the hundreds of millions of dollars. Yet, largely because of "modesty" chiefly inspired by persistent prosperity, the industry itself is accepted with nonchalance by the public.

As regards net worth, many of the knitting mills are privately owned and do not disclose capitalization. Furthermore, a rather large percentage of the managements have been notably enterprising, efficient and successful during the past twenty years, and particularly aggressive in North Carolina, Tennessee and Georgia. Much of the knitting capacity represents profits that the partners or closely owned corporations reinvested during that period in a great aggregate of expansion.

Nevertheless, the nation's great knitting capacity is unable currently to overcome shortages in most lines of common and fine knit goods. Among the immediate plagues besetting the knitters are inadequate supplies of synthetic and cotton yarns. Though early relief is not in sight, these shortages are partly the aftermath of the now abandoned OPA limitations and diversions.

Impressively, just as the Christmas shopping season attains its peak, American women are impa-

## Capitalization as Related to Production Equipment

Company	Location	Capital	Spindles	Machines	
				Full-Fashioned	Circular Knit
Wiscasset	Albemarle, N. C.	\$3,600,000	90,208	125	....
May-McEwen-Kaiser	High Point, N. C.	4,700,000	....	160	....
Brown Hosiery	Burlington, N. C.	20,000	....	....	107
Adams-Millis	High Point, N. C.	156,000 Shs NP	....	61	1,166
Archer Hosiery	Columbus, Ga.	1,200,000	....	60	....
United Hosiery	Chattanooga, Tenn.	264,000	....	....	935
Grenada Industries	Grenada, Miss.	150,000	....	35	....
Griffin Hosiery	Griffin, Ga.	150,000	....	27	90
Davenport Hosiery	Chattanooga, Tenn.	2,000,000	....	110	....
Wytheville Knitg.	Wytheville, Va.	1,001,000	....	65	....

(Data from Clark's Directory of Textile Mills.)

tiently voicing distress over the dearth of gift nylon hosiery. This situation is a severe headache which is being endured helplessly by the fine hosiery knitters. Particularly affected are Pennsylvania and North Carolina, the nation's two most highly developed full-fashioned hosiery producing areas.

The United States, according to the latest industry compilations, has approximately 2,078 knitting mills, which operate approximately 11,548 full-fashioned and 136,000 circular knitting machines. Pennsylvania still is the nation's leading state in full-fashioned hosiery production, despite North Carolina's continuing vigorous efforts to "catch up."

Pennsylvania has 173 full-fashioned mills, operating 4,515 machines, and 71 seamless mills, operating 25,851 circular knitting machines. North Carolina's mills number 253, of which 70 knit full-fashioned hosiery on 1,992 machines, and 183 knit seamless hosiery on 22,004 machines.

The thirteen Southern states have 303 seamless mills (64,901 machines) and 149 full-fashioned mills (4,388 machines).

The younger Southern industry has equipment which averages more modern than that of the North, with the result that the South produces 46 per cent of the full-fashioned hosiery, a disproportionate output, for 38.3 per cent of the nation's FF machines compared with the Northern industry's number of machines. The major primary markets for this production are New York and Chicago.

Just what the future holds for fine hosiery is as uncertain as it is intriguing. Revolutionary, remote possibilities are presented by the American Iron & Steel Institute's experiments with stockings knitted of durable stainless steel yarns—perhaps to compete some day with ho-

siery made of nylon and rayon fibers. This high tensile steel thread, 19/10,000ths of an inch in diameter, reportedly makes fine hose which possess several highly desirable qualities. Steel hose, though, will remain in the super-luxury class for some time—the "yarn" now costs \$242 a pound to produce.

Also, trade reports recently have discussed canny Scotland's experiments at knitting fine hosiery with glass yarns. Other experiments are in progress with yarns made from chemically treated milk of the cow.

All this worrying and wondering about fine hosiery for the ladies of 1947 presents a sharp contrast to the situation back in 1900. Only one pair of women's silk hosiery was sold that year for each 2,000 persons in the United States. That deplorable lack of fine hosiery, or milady's lack of interest in such finery, 46 years ago, is high-lighted by the fact that American mills now produce annually more than 1,632,000,000 pairs of full-fashioned and seamless combined—a dizzying total typical of astronomical numbers in the Early Atomic Age.

Of that vast output, approximately 420,000,000 pairs were full-fashioned, with approximately 120,000,000 pairs produced in North Carolina. That state's output averages about 44 per cent of the South's full-fashioned production, which, in turn is about 46 per cent of the American total.

Like all great American industries, the knitting companies have their closely organized associations. Strong influences for shaping the destinies of knitting are exerted by the National Association of Hosiery Manufacturers of New York and by the Southern Hosiery Manufacturers Association of Charlotte, N. C. Earl Constantine is president of the National; Taylor R. Durham is

(Continued on page 70)





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# NEW AND EXPANDING PLANTS

(Continued from page 8)

Hudson Engineering Co., Houston, Tex., for new office and warehouse building about six miles above Natchez, cost \$30,000.

**OCEAN SPRINGS** — Building — Plans made for building for M. & M. Supply Co., to cost \$18,000.

**POPLARVILLE** — Plant — Bids opened for construction of new garment factory building for Board of Supervisors of Pearl River County.

**TYLERTOWN** — Factory — Mayor and Board of Aldermen, received bids for construction of new factory building to be occupied by Haspel Brothers, New Orleans, La., manufacturers of men's clothing; 30,000 sq. ft. of floor space.

**WATER VALLEY** — Building — Rice-Stix Co., 1000 Washington St., St. Louis, Mo., let contract to McNeese Construction Co., Memphis, Tenn., for new garment building, cost \$204,000.

**WOODVILLE** — Building — Natchez Equipment Co., contemplates construction of new building on E. Main Street.

## MISSOURI

**BELLE** — Shoe Factory — Belle Builders, Inc., incorporated with Harry E. Swanson and Assoc. engage in shoe factory.

**INDEPENDENCE** — Manufacture — Carpenter & Holmes Manufacturing Co., Inc., incorporated with W. C. Carpenter and associates; to conduct a general manufacturing business.

**INDEPENDENCE** — Aluminum — National Perma-Mold Corporation incorporated with Essie A. Austin and associates; to manufacture, market and sell aluminum, brass, bronze and other metal castings.

**JEFFERSON CITY** — Manufacture — Propane, Inc., incorporated with E. B. Buell and associates; to manufacture, refine, smelt, produce, buy, sell, transport and deal in gas, gas tanks, liquified fuels, tar, oils, etc.

**JEFFERSON CITY** — Manufacture — J. T. Wren Manufacturing Co., Inc., incorporated with J. T. Wren and associates; to do a manufacturing business.

**KANSAS CITY** — Manufacture — Vic-Gene Manufacturing Co., Inc., 1455 Dierks Bldg., incorporated with H. M. Dreiseszun and associates; to manufacture and deal in men's, women's and children's clothing and wearing apparel.

**KANSAS CITY** — Manufacture — Danny Dare Boys' Wear, Inc., 229 E. Admiral Blvd., incorporated with Marvin Greenbaum and associates; to manufacture and deal in men's, young men's, boys' and children's wearing apparel and clothing of all kinds.

**KANSAS CITY** — Building — American Dairies, Inc., Walter F. Labhart, vice-president, has acquired property at southeast corner of Thirty-First Street and Gillham Plaza.

**KANSAS CITY** — Manufacture — Howard's Parts and Service, Inc., 3034 Main St., incorporated with Howard B. Sieggen and associates; will manufacture, buy, exchange, etc., and deal in both retail and wholesale goods and general merchandise.

**KANSAS CITY** — Business — Cook Products, Inc., 1403 Waldheim Building, incorporated with Reed P. Byers and associates; to conduct a general manufacturing and merchandising business.

**OVERLAND** — Addition — Southwestern Bell Telephone Co., 1010 Pine St., plans addition to telephone exchange, Woodson Road & Argyle Ave.

**ST. LOUIS** — Addition — Northwestern Products Co., 2721 Spruce Street, let contract to Charles Cristina, 5425 Columbia Ave., for one-story factory addition, 2721 Spruce Street, cost \$15,000.

**ST. LOUIS** — Factory — Louis Baking Co., 2808 N. Grand Boulevard, let contract to S. W. Drake, 3820 N. Broadway, for brick, one-story factory, 4525 N. Broadway, cost \$11,400.

**ST. LOUIS** — Plant — Advance Oven Co., 3902 N. Broadway, let contract to Drake Engineering Co., 3829 N. Broadway, for one-story factory, 4507 N. Broadway, cost \$30,000.

**ST. LOUIS** — Factory — Superior Boat Co., 3820 N. Broadway, let contract to Bonded Hauling Co., 3820 N. Broadway, for one-story factory, 4839 N. Broadway, cost \$8,000.

**ST. LOUIS** — Addition — Remis Brothers Bag Co., 408 Pine, let contract to Gamble Construction Co., 804 Pine, for one-story addition to warehouse, 1058 S. Vandeventer, cost \$60,000.

**ST. LOUIS** — Boiler House — Binz Hide & Tallow Co., DeKalb & Zepp, let contract to Robert Paulus Construction Co., 3457 Morganford Road, for brick, steel frame and concrete, one-story boiler house, 3422 DeKalb Street.

**ST. LOUIS** — Equipment — Monsanto Chemical Co., has CPA approval for production of

maleric anhydrite, processing equipment; to cost \$180,000.

**ST. LOUIS** — Warehouse — Vestal Chemical Lab., Inc., 4903 Manchester, let contract to Woermann Construction Co., 3800 W. Pine, for one-story steel queenst hut for warehouse, 4903 Manchester, cost \$12,000.

**ST. LOUIS** — Alterations — Ely & Walker Dry Goods Co., 1520 Washington, let contract to Murch-Jarvis Co., 718 Locust St., for alterations to factory and sales building, 1520 Washington, cost \$14,500.

**ST. LOUIS** — Additions — Monsanto Chemical Co., 1700 S. 2nd St., let contract to Fruin-Golson Contracting Co., 1706 Olive St., for three plant additions at 2021 Kosciuszko, to cost \$40,000, 137 W. Russell, to cost \$47,000, and 153 W. Russell, to cost approximately \$32,000.

**ST. LOUIS** — Warehouse — Bettendorf's Select Foods, Inc., 4222 Hampton Ave., let contract to I. E. Millstone Construction Co., 4343 Clayton Ave. for one-story concrete warehouse, 5121 Manchester Ave., cost \$80,000.

**ST. LOUIS** — Garage — Getz Storage Co., 4729 Easton Ave. let contract to Ahearn Construction Co., 3676 Manola, for one-story brick garage, cost \$10,000.

**ST. LOUIS** — Manufacturing — Haverstick Corp., 346 Boyle Ave., incorporated with William K. Haverstick and Assoc.; general manufacturing and mercantile business.

**ST. LOUIS** — Business — St. Louis Merchandisers, Inc., 706 Chestnut St., incorporated with William L. Held and Assoc.; general manufacturing business.

**ST. LOUIS** — Alterations — Star-Times Publishing Co., 800 N. 12th Street, let contract to Dickie Construction Co., 317 N. 11th St., for alterations, cost approximately \$70,000.

**ST. LOUIS** — Office, Etc. — Concrete Transport Mixer Co., 650 Rosedale, let contract to Pelligreen Construction Co., 318 N. 8th Street, for construction of one and two-story office and factory building, 4985 Fyler Ave.

**ST. LOUIS** — Factory — Bert Kneffe, 1726 Olive St., let contract to C. Rallo Contracting Co., 4541 St. Louis Ave., for factory, 1629 Olive; 66x108 ft.

**ST. LOUIS** — Storage Tanks — Mallinckrodt Chemical Works, 3600 N. 2nd let contract to Grove, Shepherd, Wilson & Kruege, Inc., 1025 Ambassador Building, for 2 fuel storage tanks, 65 Destrehan, cost \$25,000.

## NORTH CAROLINA

**ASHEVILLE** — Plant — Mountain Burley Tobacco Co., let contract to Merchant Construction Co., for construction of tobacco redrying plant, cost \$300,000; concrete and steel construction.

**BURLINGTON** — Enlargement — J. A. Jones Construction Co., Charlotte, has contract at \$400,000 for enlarging and improving telephone service.

**BURLINGTON** — Expansion — Southern Bell Telephone Co., H. B. Weaver, Mgr., plans improving and enlarging telephone service;

new building being constructed at East Davis St., consisting of three stories and basement, cost approximately \$400,000.

**CHARLOTTE** — Plant — Pneunafil Corp., Charles R. Harris, Executive Vice President, 2516 Wilkinson Boulevard, making repairs and alterations to recently purchased building.

**CHARLOTTE** — Warehouse — Speas Co., Jewell D. Anderson, Mgr., let contract to B. W. Bartholomew, for warehouse building.

**CONCORD** — Manufacture — Carolina Manufacturers, Inc., incorporated with H. W. Calloway, Sr., and associates; capital stock \$100,000; to manufacture and process goods.

**GREENSBORO** — Manufacture — Tuft-Wick Corporation, incorporated with L. S. Woodson and Assoc.; capital stock \$20,000; manufacture bedspreads, yarns, cloth, etc.

**HENDERSONVILLE** — Plant — Skyland Textile Co., recently incorporated, has leased property for manufacture of hand-transferred anklets.

**HIGH POINT** — Furniture — Traditional Upholstery Company, Inc., incorporated with L. C. Brown, and associates; capital stock \$100,000; to deal in furniture.

**NORTH WILKESBORO** — Furniture — Key City Furniture Company, incorporated with J. E. Caudill and associates; capital stock \$250,000; to deal in furniture.

**RALEIGH** — Manufacture — Granette Bottling Co. of Raleigh, Inc., incorporated with Elizabeth P. Hines, Roanoke Rapids, and Assoc.; capital stock \$100,000; to bottle and sell soft drinks.

**WILMINGTON** — Factory — Garver Manufacturing Co., let contract to W. A. Simon, Wilmington at \$125,000, for construction of Sport shirt manufacturing factory.

## OKLAHOMA

**OKLAHOMA** — Pipeline — Stanolind Pipeline Co., Bruce C. Clardy, Pres., Fair Bldg., Fort Worth, Tex., plans 612 miles of 20 inch pipeline from Drumwright, Okla., to Whiting, Ind.

**TULSA** — Addition — The World and The Tribune, 317 S. Boulder, has work started on construction of new three-story structure with basement; roof and partitions removed; new building to be part of the present newspaper plant and will be leased to the Newspaper Printing Corp.

## SOUTH CAROLINA

**CHAPPELLE** — Manufacture — Chappell Manufacturing Co., incorporated with Fred J. Weir and Assoc.; capital stock \$25,000; to manufacture pants, shirts, underwear, etc.

**COLUMBIA** — Plant — Hood Motor Co., Inc., incorporated with Burke Hood as President with capital of \$50,000.

**EDGEFIELD** — Manufacture — Edgefield Garment Co., incorporated with Fred J. Weir, and Assoc.; capital stock \$50,000; to manufacture pants and other garments.

**GREENVILLE** — Radio Station — Fiske- (Continued on page 68)

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# New and Expanding Plants

(Continued from page 66)

**Carter Construction Co.**, has contract for FM radio station, two story, concrete and steel, cost approximately \$40,000; Yellow Cab Co., owner.

**GREER**—Plant—Piedmont Shirt Co., E. A. Burch, President, has leased second floor of Chevrolet Building, for shirt factory; as soon as renovations are completed, one-hundred machines will be installed.

**HAMPTON**—Railroad Extension—Hampton and Branchville Railroad, has under construction, a 12 mile extension, from Hampton to a point in Luray, connecting with Seaboard and Southern Railways.

**MONCK'S CORNER**—Improvements—Wright Contracting Co., Columbus, Ga., has contract at \$3,822,800 for furnishing, processing and placing concrete or rock slope protection on dams and dikes of Santee-Cooper Project.

**ROCK HILL**—Plant—Celanese Corp., seeking CPA approval for construction of plant at Rock Hill for manufacture of synthetic textile yarns for mills throughout the South Atlantic States, estimated cost \$20,000,000, including \$4,000,000 for labor and an indefinite amount for equipment; Daniel Construction Co., Greenville, general contractors.

**SPARTANBURG**—Storage Plant—Plans under way to construct a \$225,000, 6,500,000 gallon petroleum storage plant, operated as Southeastern Terminal and located on Glendale-Cann Croft Road.

**SPARTANBURG**—Plant—Draper Corporation let contract to C. M. Guest & Sons, Anderson, for textile plant, to cost approximately \$115,000.

**SPARTANBURG**—Plant—International Minerals and Chemical Corp., A. L. Foster, Superintendent, have work started by Fiske-Carter Construction Co., on laying of foundation for sulphuric acid plant, cost approximately \$100,000; 4-chamber Mills-Packard plant, will produce 20,000 tons of acid annually and will be used in the manufacture of 50,000 tons of superphosphate fertilizer.

**WALHALLA**—Grading—Fulmer Construction Co., Columbia, has started work on grading of site, S. Laurel Street, for proposed \$200,000 plant for Cotton Blossom Brands garment factory; construction of the one-story reinforced concrete structure has been started.

## TENNESSEE

**ATHENS**—Building—Tennessee Motor Co., has CPA approval granted for auto repair and service building; to cost \$30,000.

**CARTHAGE**—Plant—Borden Co., has CPA approval for milk processing plant, cost \$39,000.

**CHATTANOOGA**—Foundry Building—Columbian Iron Works, plans construction of a foundry building, cost approximately \$275,000; brick, steel, concrete, metal sash.

**CHATTANOOGA**—Addition—Tennessee Paper Mills, N. Chattanooga Ave., let contract to John C. Beking Co., for construction of addition to mill, which will manufacture shipping cases and cartons, cost \$175,000.

**CHATTANOOGA**—Plant—Tennessee Paper Mills has CPA approval for construction of gypsum board plant, cost \$172,472; plans call for erection of an addition to the plant on Manufacturers Road in North Chattanooga to house the new equipment that will be used in the production of gypsum, and other types of board; cost does not include equipment and machinery.

**CHATTANOOGA**—Building—Allison Motor and Equipment Co., has CPA approval granted for auto service building, to cost \$61,000.

**CHATTANOOGA**—Shop—E. E. Hanson, Gen. Pur. Agent, Southern Railroad Co., Washington, D. C., received bids for new diesel locomotive shop for Southern Railway System.

**DAYTON**—Plant—Ice Land Gardens, Inc., Jack Frazier, President, has CPA approval for construction of frozen-food locker plant, cost \$80,000; concrete construction and contain 500 rental lockers.

**GAINSBORO**—Plant—Borden Co., has CPA approval for construction of milk processing plant, cost \$49,750.

**KINGSFORD**—Warehouse, Etc.—A. D. Brockman has CPA approval for construction of warehouse and radio studio, cost \$44,934.

**MEMPHIS**—Refinery—Buckeye Cotton Oil Co., 2782 Chelsea, let contract to H. K. Ferguson of Cincinnati to expand oil refinery facilities, cost \$23,000.

**MEMPHIS**—Bakery—S. L. Bright has permit for erection of wholesale bakery on south side of Broad Street.

**MEMPHIS**—Plant—Louis Santi has permit for erection of ice cream plant, southeast corner of Severson and James.

**MEMPHIS**—Building—Tri-State Ruling & Binding Co., W. D. Smith, has approval for construction of building, northeast corner of Mill and Fourth.

**MEMPHIS**—Plant—National Battery Co., Saint Paul, 1, Minn., has 50,000 sq. ft. factory on Person Ave., costing \$350,000.

**MEMPHIS**—Warehouse—U. S. Bedding Co., 1047 Florida, is erecting \$81,000 warehouse.

**MEMPHIS**—Garage and Storage Building—Herff Motor Co., 309 Monroe, let contract to Consolidated Contractors, Inc., for garage and storage building, cost \$75,000.

**MEMPHIS**—Expansion—Dixie Tank and Bridge Co., 2144 Lamar, erecting \$225,000 expansion facilities.

**MEMPHIS**—Building—J. I. Case Co., acquired property to erect distribution branch for farm equipment building, contain 100,000 sq. ft.

**MEMPHIS**—Quarters—Kraft Foods Co., will build \$128,000 distributing quarters at 1249 Helston St.

**MEMPHIS**—Pottery, Etc.—Clay Products Corp., incorporated with John W. Montedoni, co and Associates; manufacture and sell brick, tile, pottery, etc.

**MEMPHIS**—Plant—Davis-Weil Manufacturing Co., incorporated with Ernest P. Weil, and Associates; manufacture and sell disinfectants, insecticides, soaps, etc.

**NEWPORT**—Plant—Tennessee Valley Furniture, Inc., has leased plant building of Wood Products Co., for manufacture of hat racks and office chair cushions; Wood Products Co., now has new building under construction.

**MURFREESBORO**—Plant—Wilson & Co., have CPA approval for construction of cheese plant, cost \$103,503.

**NASHVILLE**—Bus Terminal—Plans in progress for modern bus terminal at Sixth Ave. and Broad St., for Trailway Bus Depot of Nashville, Inc.; cost approximately \$300,000.

**OAK RIDGE**—Plant—Major Gen. Leslie F. Groves, Chief of Manhattan Project, has awarded contracts, one to Monsanto Chemical Co. of St. Louis and one to General Electric Co., for experimental power plant, to be built for development of nuclear energy in generation of electric power; Monsanto Chemical Co. now in process of working on power pile for new project.

**TULLAHOMA**—Plant—Lannom Manufacturing Co., Grinnell, Iowa, plans moving its plant for the manufacture of wool baseball yarn to Tullahoma; unit at Shelbyville operating in the production of knit linings for baseball gloves will be consolidated with the new Tullahoma plant.

## TEXAS

**TEXAS**—Plant—C. F. Braun Co., Los Angeles, Calif., has contract for natural gasoline plant, situated in Slaughter Field of West Texas; Stanolind Oil & Gas Co., Dallas, owners.

**TEXAS**—Pipeline—Magnolia Pipe Line Co., J. L. Latimer, Pres., Dallas, plans 20 inch oil line from Corsicana, Tex. to Patoka, Ill.

**ALPINE**—Depot—Southern Pacific Railroad Co., H. H. Blair, Houston, received bids for depot.

**ALVIN**—Plant—T. A. Newman, has CPA approval for construction of one-story rice plant, cost approximately \$30,000.

**AUSTIN**—Plant—Tex-A-Cola Bottling Company of Dallas, A. L. Roberts, Pres., has selected three acre site one and one-fourth miles north of Austin, south of magnesium plant, as site for proposed syrup factory.

**BAYTOWN**—Plant—General Tire & Rubber Co., let contract to Tellepsen Construction Co., 396 Clay Ave., Houston, for construction of additions to carbon black plant; will include construction of roads, railroads, parking areas, utilities and services and a masonry and a steel corrugated asbestos building; negotiated contract price \$240,000.

**BROWNWOOD**—Pipe Line—Deaton & Sons, Odessa, has contract for 14-1 miles of pipe line from new gas field at Thrifty to Brownwood, for City.

**CORPUS CHRISTI**—Barge Canal—Nueces County Navigation District, Richard King, Guengerich & Cohn Bldg., plans barge canal, approximately 3½ miles, terminating in vicinity of Tule Lake, a small turning basin.

**CORPUS CHRISTI**—Plant—E. L. Caldwell, 117 N. Chaparral St., let contract to J. W. Birmingham, 1809½ Morgan Street, for construction of farm equipment and manufacturing plant, 3210 Agnes Street, cost \$25,000.

**CORSICANA**—Factory—Chamber of Commerce, received low bid from Eckert-Pack Construction Co., 1307 Liberty Bank Building, Dallas, for construction of one-story, brick steel and reinforced concrete hat

factory building; Texas Miller Products, Inc., Lessees.

**DALLAS**—Warehouse—Roddiss Lumber & Veneer Co., 2915 Latimer St., let contract to E. V. McCright, 302 S. Taylor St., for construction of one-story, masonry warehouse, Medill Street, off Grand Avenue, cost \$35,000.

**DALLAS**—Service Station—Sinclair Refining Co., 840 S. Lamar St., will construct service stations at following locations: 5307 Ross Ave., cost approximately \$15,000; 2193 Ft. Worth Ave., cost \$12,000; 817 W. Jefferson Ave., cost \$12,000.

**DALLAS**—Factory, Etc.—Best Foods, Inc., 1817 N. Houston, has selected site at Airline Park, for construction of factory and warehouse; masonry construction, 40,000 sq. ft. floor space.

**DALLAS**—Shop, Etc.—George Thornton, 1025 Santa Fe Building, let contract to Miller & Norton, 4203 Ross Ave., for construction of two-story masonry shop and warehouse, 1112 Ross Ave., cost approximately \$32,500.

**DALLAS**—Warehouse—Pryor Products Co. will build a warehouse at 4828 Racell St.; to cost approximately \$10,000.

**DALLAS**—Plant—Dallas Morning News, G. B. Dealey, Commerce and Lamar Sts., let contract to Henry C. Beck, Tower Petroleum Bldg., for newspaper plant on Houston and Young Sts.

**DALLAS**—Facilities—Texas & Pacific Railroad, will construct fueling and servicing facilities for the four Diesel streamliner locomotives, at Fort Worth, Marshall, Big Spring, and El Paso; total cost \$248,700.

**DALLAS**—Factory Building—A. L. Silver, let contract to Miller & Norton, for construction of factory building, Main and Crowder Streets; two-story, masonry construction; concrete foundation.

**DENISON**—Radio Station—Fred Conn, Denison Herald publisher and Millard Cope, publisher of Marshall News Messenger, filed application with FCC for permit to establish standard 1,000 watt radio station.

**EDDY**—Refrigeration Plant—Tri-County Refrigeration Co-operative, Inc., has fund for completion of locker plant.

**FORT WORTH**—Addition—Swift Packing Co., let contract to Robert E. McKee, 2708 Inwood Road, Dallas, for construction of addition to packing plant.

**FORT WORTH**—Factory—Mrs. R. E. Carton, 1312 Throckmorton, let contract to Marshall R. Sanguinet, 1911 Elkridge, for construction of one-story, concrete tile factory building, 301 Hemphill, cost \$14,000; built-up roof; concrete floors.

**FORT WORTH**—Warehouse—Leonard Brothers has started work on construction of one-story, reinforced concrete warehouse, 701 N. Hampton, cost approximately \$100,000.

**FORT WORTH**—Factory Building—Dalton's Mayonnaise Co., will build a one-story factory building at 1400 S. Riverside Dr.; to cost approximately \$12,000.

**FREEPORT**—Plant—War Assets Administration accepted bid of Dow Chemical Co., on part of the Government-built chemical facilities at Freeport; property consists of 12 steel frame structures with a total area of 158,970 sq. ft. and a supply of production equipment.

**GANADO**—Locker & Frozen Food Plant—H. E. Sutton, El Campo, has contract at \$19,500 for frozen food plant and locker, for Central Power & Light Bldg., Corpus Christi.

**GARLAND**—Office Addition—Texas Telephone Co., Sherman, will construct one story face brick, telephone office addition.

**GARLAND**—Building—J. Y. Taylor Manufacturing Co., has plans in progress for one-story, masonry factory building, 100 Bankhead St., cost \$20,000; composition roof, structural steel trusses, reinforced concrete foundation.

**GARLAND**—Lean-To and Office—International Engine Rebuild Corporation, Belt Line Rd., let contract to W. H. Wallace, for one-story lean-to and office building.

**HARLINGEN**—Building—Holsum Baking Co., William L. Irammell, President, let contract to E. J. Waitman, Harlingen, for construction of one-story building which will contain 23,000 sq. ft. of floor area; concrete and structural steel frame; Keene cement plaster throughout; built-up tar and gravel roof.

**HOUSTON**—Plant—Dow Chemical Co., bidder for acquisition of thiokol synthetic rubber plant, from War Assets Administration.

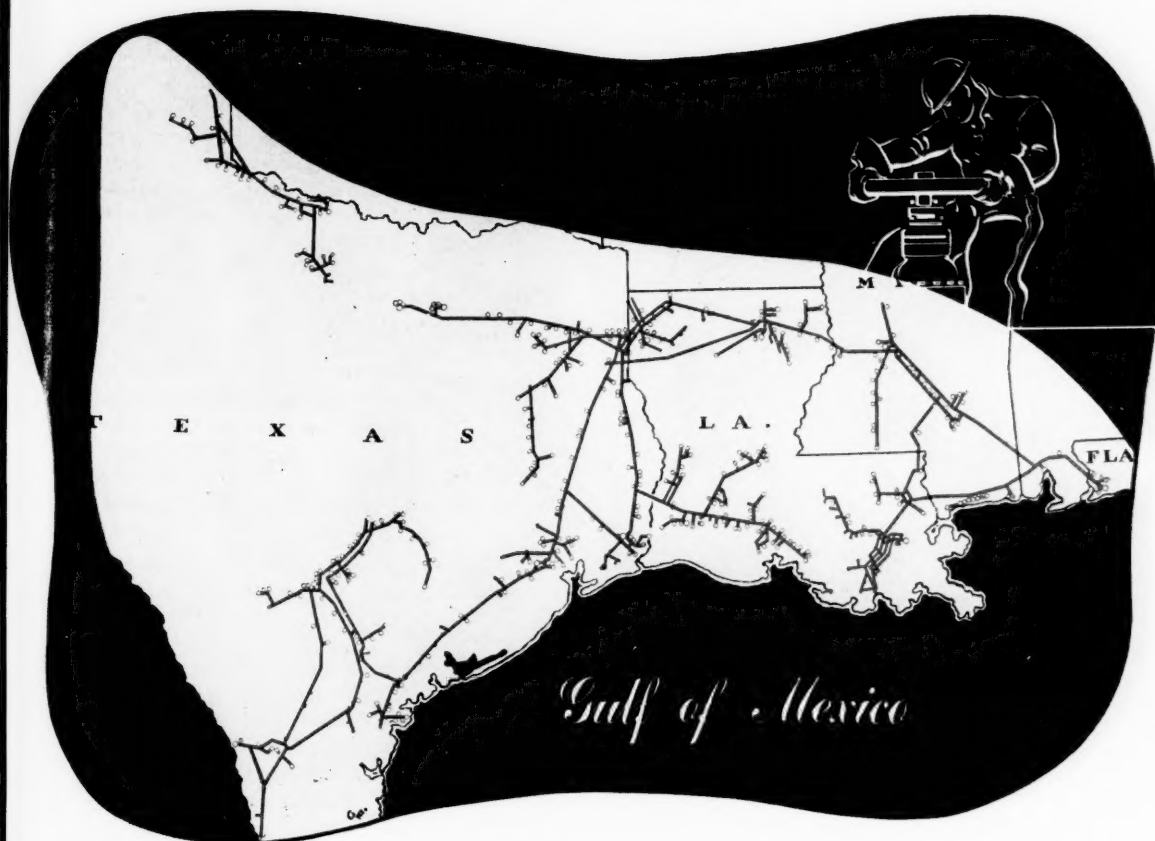
**HOUSTON**—Shop Building—William W. Watson, Houston, has CPA approval and plans complete for one-story shop building, Memorial Park, cost approximately \$10,000; brick veneer construction; owner builds.

**HOUSTON**—Warehouse—M. K. T. Railroad Co., B. A. Erwin, Gen. Mgr., has CPA approval for warehouse, corrugated asbestos siding, etc.; cost approximately \$80,000.

**HOUSTON**—Warehouse—Anchor Post Fence

(Continued on page 70)

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# New and Expanding Plants

(Continued from page 68)

Co. of Texas, 1505 Gentry Street, let contract to Telepsen Construction Co., 3900 Clay Ave., Houston, for construction of one-story masonry warehouse and office; built-up roof, etc.

**HOUSTON**—Warehouse—Thomas H. Sullivan plans construction of warehouse, Leeland at Chenevert, cost approximately \$250,000; 100 x 150 x 100.

**HOUSTON**—Refinery—Corn Products Refining Co., Morris Sayre, President, Kansas City, Mo., has selected Ship Channel site for construction of \$10,000,000 manufacturing plant for manufacture of syrup and by-products from corn, milo maize and other grains.

**HOUSTON**—Addition—Pittsburgh Plate Glass Co., 101 Crawford St., let contract to W. S. Bellows Construction Co., 716 N. Everton St., for construction of additions and alterations to present 4-story buildings, Liberty Road.

**HOUSTON**—Addition, Etc.—Southern Acid & Sulphur Co., LaPorte Road, let contract to Telepsen Construction Co., 3900 Clay Ave., at \$25,071, for repairs and addition to chemical plant, LaPorte Road; includes concrete foundation for new plant building; ammonium phosphate plant addition and general repairs to present plant.

**HOUSTON**—Garage Building—Houston Transit Co., plans one story garage building, Taylor St. & Alamo.

**HOUSTON**—Plant—Corn Products Refining Co., contemplates construction of \$10,000,000 refinery for manufacture of sugar, syrups and high-protein feed from grain sorghum; seeking site; will have a productive capacity of 100,000,000 pounds of sugar dextrose; by-products will be 50,000 tons of high-protein feed and other grain commodities.

**HOUSTON**—Building—Southern Blue Print and Supply Co., W. Ernest Japhet, President, plans acquiring three-story building, southwest corner of Prairie and San Jacinto; plans remodeling.

**HOUSTON**—Building—H. Heinman, has plans in progress for construction of one-story manufacturing building, 7114 Avenue C., cost approximately \$25,000; 20x120; steel frame; metal siding and roof.

**HOUSTON**—Warehouse—Houston Belting & Supply Co., John Long, Manager, receiving bids, for construction of one-story warehouse, Walker Avenue at Chenevert Street; steel columns and roof trusses; steel windows; built-up roof, etc.

**HOUSTON**—Plant and Sales Rooms and Office—Morgan-Whitley, 829 LaBranch St., let contract to Walter Rainey, 1514 Chenevert Ave., for two-story plant, sales room and office building at Bastrop, between Calhoun and Jefferson Sts.; to cost approximately \$265,000.

**HOUSTON**—Remodeling, Etc.—Maxwell House Division of General Foods Corp., William Durham, Plant Manager, receiving bids for paving in parking areas; painting; machinery installation; electric wiring; piping and plumbing work, cost \$350,000.

**HOUSTON**—Laboratory Building—Bids received for construction of one and two-story laboratory building at Deer Park for Shell Oil Co.

**HOUSTON**—Expansion—Gulf Portland Cement Co., plans \$1,000,000 expansion program at plant situated on the north side of the Houston Ship Channel near the Clinton docks; equipment to be used from recently acquired Sinter plant at Mobile, Ala.; Ideal Cement Co., subsidiary, now completing plans for moving kiln from Mobile plant to Houston.

**HOUSTON**—Warehouse—Anchor Post Fence Co., received bids for construction of one-story masonry warehouse, and office.

**MINERAL WELLS**—Plant—Texas Vitritified Pipe Co., has plans and specifications on proposed \$500,000 plant.

**ORANGE**—Addition—J. E. du Pont de Nemours & Co., Wilmington, Del., announced plans for an additional unit at the Sabine River Works being built on a 1,000-acre site about 3 miles west of Orange; new unit to make adipic acid, ingredient in nylon manufacture.

**PORT ARTHUR**—Radio Station—Port Arthur Broadcasting Co., has permit for new 250-watt radio station.

**SAN ANTONIO**—Plant—Aero Planing Mill, 119 Humble St., let contract to Judson H. Phelps, Ltd., 317 Insurance Bldg., for one-story industrial building of strain steel construction, to be used as planing mill.

**SAN ANTONIO**—Plant—Borden Co., George Maggard, Manager, has plans nearing completion for construction of building, designed for two stories, 875 E. Ashby Street; new building will be used for manufacture and storage of ice cream.

**SAN ANTONIO**—Warehouse Addition—Southwestern Bell Telephone Co., H. S. Mathewson, Buildings and Equipment Engr., 803 Telephone Administration Bldg., Dallas, plans addition to warehouse, 302 Dakota St.; one story, masonry and steel.

**SAN ANTONIO**—Building—Plans prepared for \$435,000 maintenance shop building for San Antonio Transit Co., Laurence Wingerter, Vice Pres.; facing N. Flores St., from east; building to be of steel framework; hollow tile construction with brick facing, aluminum sash windows.

**SAN ANTONIO**—Plant—Lone Star Cone Co., John G. Kaine, 406 S. Texas Bank Bldg., let contract to C. L. Browning, Jr., 312 Insurance Bldg., for converting dismantled airplane hangar into factory building, at E. Commerce and M. K. T. Railway; to cost \$58,500.

**TAYLOR**—Plant—Drs. E. W. Stromberg and E. G. Garrett, let contract to W. T. Dugan, Manor, for construction of one-story, reinforced concrete and tile creamery plant.

**TEMPLE**—Additions—Southwestern Bell Telephone Co., has awarded contract to Guy H. Baker, P. O. Box 466, cost approximately \$75,000, for alterations and additions to central office building.

**TEXARKANA**—Plant—Tex-Ark Rock Wool Corp., J. M. Lile, President, incorporated with capital of \$200,000; plans construction and operation of a new manufacturing plant to produce rock wool insulation, both granulated and in batts; will be located on E. Ninth Street.

**TEXARKANA**—Building—Two States Telephone Co., A. C. Stuart, 800 Texarkana National Bank Bldg., Pres., plans two story telephone building, Olive and Olive Sts.; cost approximately \$250,000.

**TEXAS CITY**—Plant—Monsanto Chemical Co., St. Louis, Mo., has plans for acquisition of styrene plant at Texas City from War Assets Administration.

**TEXAS CITY**—Expansion—Carbide and Carbon Chemicals Corp. will soon begin construction of facilities for manufacture of Vinylite as part of a general building program involving expenditure of about \$15,000,000. Will be erected on land owned by the company west of its present location between LaMarque and Texas City. Expansion program includes construction of unit for manufacture of butyl alcohol, extensions to increase capacity for producing industrial organic solvents and anti-freeze compounds and additions to shop, laboratory and service buildings.

**TEXAS CITY**—Plant—Mainland Milk Co., Victor T. Malin, Jr., Manager, will receive bids for construction of a one-story milk plant, 902-10th Street; brick and hollow tile construction; concrete foundation, cost \$50,000.

**TOMBALL**—Manufacturing—Grogan Lumber & Supply Co., Inc., incorporated with H. D. Grogan and assoc.; capital stock \$16,000; a manufacturing concern.

**WEST**—Facilities—Tennessee Gas & Transmission Co., Gardiner Symonds, Pres., Commerce Bldg., plans pipe line facilities, cost approximately \$60,000,000.

**WICHITA FALLS**—Building—Nutrena Mills Co., R. E. Grenlee, Manager, has plans in progress for construction of six-story mill building, 6th at Lee, cost \$45,000.

## VIRGINIA

**COVINGTON**—Addition—West Virginia Pulp and Paper Co., has CPA approval for construction of an addition to present building, to house a machine for the manufacture of fiber board from wood pulp.

**ELKTON**—Plant—Merck & Co. has CPA approval for drug and chemical processing plant at Elkton, Rockingham County, cost \$295,000; will consist of four buildings.

**RICHMOND**—Building—Dovle & Russell, Central National Bank Building, Richmond 19, have contract for factory and office building.

**ROANOKE**—Addition—English Construction Co., Altavista, has contract for addition to telephone building.

**STRASBURG**—Addition—Strasburg Silk Mills has CPA approval for addition and alteration to silk mill, cost \$220,000.

**WEST POINT**—Building—W. P. DeShazo, has CPA approval for expenditure of \$12,500 for garage building.

## WEST VIRGINIA

**WEST VIRGINIA**—Lines—Tennessee Pipeline Co., Austin, Tex., filed application with Federal Power Commission for looping gas transmission lines to West Virginia for use and utilization light and fuel 220,000,000 cubic feet of gas daily.

**CHARLESTON**—Building—Rose City Press, Inc., let contract to H. B. Agsten & Sons, for erection of a \$100,000 plant, 513 Capitol Street; reinforced concrete; 100x140 feet.

**CHARLESTON**—Antenna—Capitol Broadcasting Corp., WCAW, has \$14,000 permit for transmitter building and antenna at MacCorkle Ave. and 16th St. in South Ruffner.

**HUNTINGTON**—Coal Company—John Kelly and Dr. H. D. Hatfield have organized a \$1,500,000 corporation, to be known as Kelly-Hatfield Co.; capital stock \$250,000; to deal in coal and timber lands in Logan and adjacent counties.

## Textile Expansion

(Continued from page 64)

executive secretary of the Southern. These organizations are closely cooperative, admitting that the functions of each one bolsters the welfare of the other.

While basic factors now are impelling this industry to seldom equalled development activities, a strong additional stimulus will be given late next year. Then the industry will hold in New York's Grand Central Palace an exhibition of post-war models of knitting machines. These are being described even now as assuring a new era of advance in style, beauty and serviceability of the product and greater speed in production—factors that appeal strongly to the mills which possess ample capital to finance modernization as rapidly as circumstances will permit.

## Stalin's Utopia

(Continued from page 37)

ly, sharply. The job must be done, no matter how many lives it cost, he told us. As long as there were millions of small land owners in the country, he said, the revolution was in danger. . . . There was no room for softness or regrets. We did not misunderstand him. After such a warning there could be no limit to horror."

During another harvest season, Kravchenko was drafted from the university to serve as grain collector in the Dniepropetrovsk region. His briefing session before the Communist Central Committee imparted these instructions: "Your job is to get the grain at any price. Pump it out to them, wherever it's hidden, in ovens, under beds, in cellars or buried away in back yards. Through you, the Party Brigades, the villages must learn the meaning of Bolshevik firmness. . . . Don't be afraid of taking extreme measures. The Party stands four-square behind you. Comrade Stalin expects it of you. It's a life-and-death struggle; better do too much than not enough."

Selected in 1943 to join the Russian Purchasing Mission in Washington, Kravchenko was given five days in Moscow to familiarize himself with the detailed terms of the U.S. lend-lease law, wartime pro-

(Continued from page 72)



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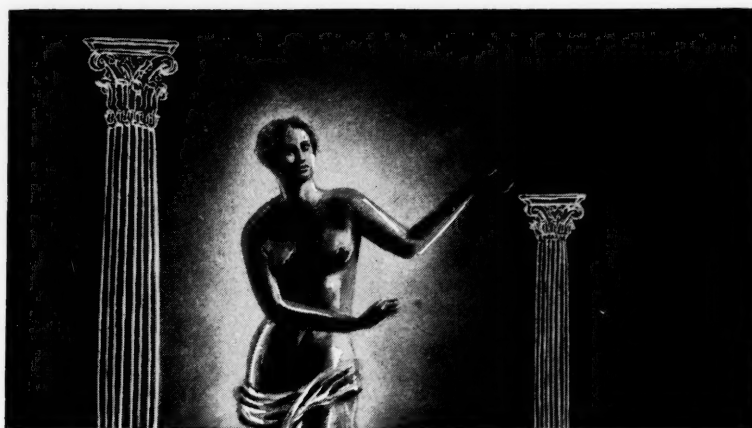
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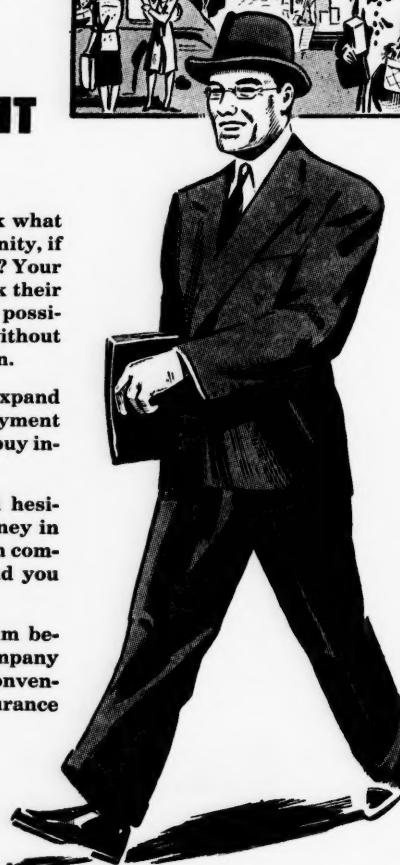
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**Stalin's Utopia**

(Continued from page 70)

duction controls, and the inter-allied system of joint shipping allocations. At length he stood at attention before a member of the All-Union Central Committee of the Communist Party, who delivered the formal charge of duty:

"Comrade Kravchenko, you are about to undertake a foreign mission. You will conduct trade in a foreign environment, among the capitalists whom we rightly despise and distrust. We count on you not to have your head turned by the sight of consumer goods and the temptations of a society in the final stages of rotten degeneration. Never forget your historic mission as the representative of the new Soviet civilization.

"True, America is helping us now. But we must not lose sight of the fact that the help is given grudgingly, out of dire necessity. True, some of our war aims at the moment coincide with theirs, but the two worlds remain irreconcilable. Hold fast to the knowledge that as a Communist you are the sworn enemy of the capitalist society whose world center today is America. Communism and capitalism can never be reconciled!

"After you reach America, you will continue to take an active part in the work of our Party. But remember that so far as the American authorities are concerned you are not, and never have been, a Party member. You must insist that you're not even interested in politics. In America the organization of the Communist Party of the U.S.S.R. functions on an underground basis. You will not take your Party card with you, but the fact of your membership will be known to the proper people. Outwardly, you will be an engineer and nothing more. Is that clear?"

"Yes, I understand," Kravchenko replied.

Twenty months later Kravchenko dramatically ended his ten-year fight "to bolster a battered and crumbling faith with stout illusions."

He fled his Russian post in Washington, renounced the Communist Party publicly, denounced Stalin's Police State, and sought lonely and

(Continued on page 74)



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## Stalin's Utopia

(Continued from page 72)

bitter obscurity in New York, to write his book.

The work is dedicated "to the memory of those millions who have died in the struggle against Soviet absolutism . . . to the progressive and socially-minded people everywhere who help in the struggle for a free, democratic Russia, without which there can be no enduring

peace on earth."

This dedication was dated February 11, 1946.

Such is one side of the picture of the rise of Communism in Europe. On the other side, we have the official statement of Moscow on November 6, 1946, that the revolution "awakened the masses and launched them on the road toward a new, free, creative life."

Certainly the blurred area between the two pictures merits at

least the critical examination of the American people.

## Saw Palmetto

(Continued from page 41)

The cabbage palm soon entered his experiments, and he began by concentrating on its bark. He succeeded in having its components separated in Lakeland, using a carpenter's hammer at one stage. Meanwhile, he accidentally discovered the way of handling the cabbage palm to make it more susceptible to the saw. As proof, he has thin strips of the wood, which incidentally will bend at least three-quarters without breaking. And the sawing was done by a Lakeland lumber mill with a circular saw.

He estimates that he spent \$7,400 on the experiments. Soon he found that he could arrive at a gratifying result simply by mixing saw palmetto cork and fiber with the powdered limestone and the chemical. The mixture is made at about the consistency of bread batter and placed in a mold and formed, without pressure, in any shape desired.

Capable of withstanding 700 degrees of heat, the stonelike product, McCrary points out, can be made into interior shelving, newel posts and stairways, and bathroom fixtures, as well as used to erect the outer and inner walls of the residence. The material has many construction virtues. It will not rot or burn or rust. It resists termites. It lends itself to air-conditioned buildings.

Although the stonelike product is not expensive by present-day standards, it is the most durable of a number of construction tiles possible from the same process. By adding more filler, Mr. McCrary can develop material which he calls Palfiber. He also plans to back some of the material with cabbage palm lumber. With cabbage palm sawdust he can produce a convincing imitation pecky cypress wood. The combinations containing over 70 per cent filler of cork or fiber or sawdust can be nailed and sawed like ordinary lumber, McCrary said.

Working with the saw palmetto and the cabbage palm, the engineer has found that each has certain advantages as building material sources. There is a greater supply of

(Continued on page 78)

To Serve the South's Expanding Needs

# LEBANON

opens a new office in

# ATLANTA

In order to meet the urgent needs of rapidly expanding southern industry, Lebanon Steel Foundry has opened a new sales engineering office in Atlanta.

Pioneers in the development of corrosion resistant and high strength alloy and steel castings, Lebanon has developed new foundry techniques and practices which aid materially in the production of corrosion resistant and high strength alloy and steel castings of superior characteristics.

The Atlanta office will be in charge of Mr. John H. Boyd.

## LEBANON STEEL FOUNDRY

17 Edgewood Avenue, N. E.

Atlanta 3, Georgia

Main Office and Foundry  
LEBANON, PENNSYLVANIA

New England Office  
Boston, Mass.

Southwestern Office  
Houston, Texas

**LEBANON** Castings  
ALLOY AND STEEL



## A Bank For Southern Manufacturers

That precisely describes First and Merchants because of its close association with Southern industry since 1865. Hundreds of manufacturers are among its customers. Therefore, it knows and understands Southern industrial finance. We want to make loans—bring your financial problems to us.

## FIRST AND MERCHANTS National Bank of Richmond

John M. Miller, Jr., Chairman of the Board

H. Hiter Harris, President

CAPITAL AND SURPLUS SIX MILLION DOLLARS

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Have you considered the advantages of a  
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*Your inquiry by mail or telephone  
will receive our prompt attention.*

RESOURCES 190 MILLION DOLLARS.

### UNION TRUST COMPANY OF MARYLAND

Main Office: Baltimore & St. Paul Sts., Baltimore 3, Md.

Member Federal Deposit Insurance Corporation—Federal Reserve System



While cosmopolitan in its general appeal, and modern up to this moment in its equipment, there is a peculiar flavor of The Old South here which Southerners are quick to note and appreciate. They feel at home and come back to us again and again.

Rates \$3.00 per day and up. Every room with bath or shower. Centrally located.

*The Southern Hotel*  
BALTIMORE 2

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HOTEL THOMAS JEFFERSON	Birmingham
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HOTEL FAUST	Rockford
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HOTEL LAMAR	Meridian
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<b>SOUTH CAROLINA</b>	
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HOTEL EDSON	Beaumont
HOTEL BROWNWOOD	Brownwood
HOTEL CORTEZ	El Paso
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HOTEL GALVEZ	Galveston
HOTEL JEAN LAFFITE	Galveston
CORONADO COURTS	Galveston
JACK TAR COURT HOTEL	Galveston
MIRAMAR COURT	Galveston
HOTEL CAVALIER	Galveston
HOTEL PLAZA	Laredo
HOTEL LUBBOCK	Lubbock
HOTEL FALLS	Marlin
HOTEL CACTUS	San Angelo
HOTEL MENGER	San Antonio
ANGELES COURTS	San Antonio
<b>VIRGINIA</b>	
HOTEL MOUNTAIN LAKE	Mountain Lake



ALWAYS  
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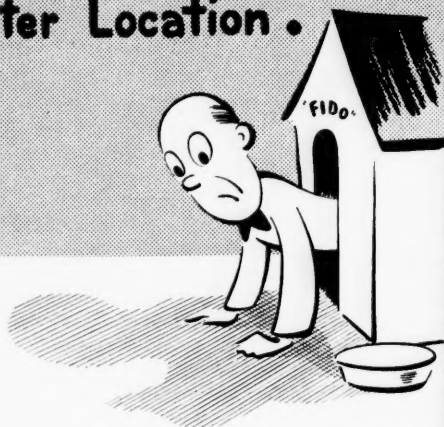
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**NATIONAL HOTEL**

EXECUTIVE OFFICES — ANICO BLDG., GALVESTON, TEXAS

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## better Location?



Has it come to this? Then come to Mississippi! You'll get a warm welcome. You'll find friends—not friction, cooperation—not coercion. The hospitable attitude of native-born Americans toward industry in Mississippi is inherent. They see a future in industrial employment, and are willing to give an honest day's work for an honest day's pay. The interest of Mississippians in your success is measured by the fact that they are daily investing their money to build plants for new industries. This sort of faith assures continued cooperation from community and worker.

You'll find too that Mississippi offers many pleasant vacation retreats—charming, restful spots where you can fish, hunt, golf, or just relax. Why not get away—make this a combined business-pleasure trip?

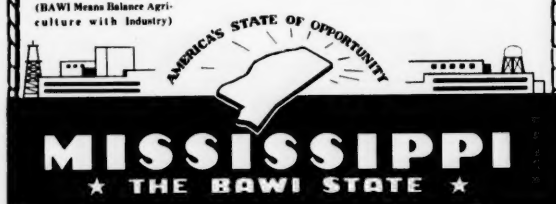


Ask for a confidential report on Mississippi's industrial opportunities.

MISSISSIPPI AGRICULTURAL AND INDUSTRIAL BOARD

New Capitol Building  
JACKSON, MISSISSIPPI

(BAWI Means Balance Agriculture with Industry)



## LETTERS

Below are some interesting letters received recently. How would you answer them? Editor.

MANUFACTURERS RECORD Publishing Company  
Baltimore 3, Maryland

We wish to assure you that we sincerely appreciate your outstanding support for the South and the Southern industries.

There is one question we would like for you to answer for us, if you can.

Our plant is located at Chatsworth, Georgia on the L. & N. Railroad and we mine and grind talc and soapstone, which is shipped in carload quantities almost exclusively to the Northern markets.

We have a great deal of trouble getting sufficient box car equipment for shipping our product, notwithstanding we see numbers of empty box cars traveling north right by our plant.

We have been told that there are four loaded cars moving south for every loaded car moving north.

We have asked the question why it would not greatly relieve the car shortage if more of these empty cars going north could be loaded with Southern products for the Northern markets.

We understand that the Northern railroads require that when cars are unloaded in the South they be returned empty to the Northern lines unless the individual car can be loaded back to the point in the North from which it was shipped to the South.

We would like to know if this information is correct and if you can advise us we will greatly appreciate it.

Unquestionably, the MANUFACTURERS RECORD has been the biggest single factor in the industrial development of the South, bringing to the attention of northern investors the vast opportunities for capital and brains and to the southern folks the same opportunities for development.

As a boy working with my father in the millwork line at Griffin, Ga., the man who built the first cotton mill at Griffin, Capt. W. J. Kincaid, a local man used to say to me: "Ed, the cotton mills MUST come to the cotton fields. You will live to see it after I am gone." Capt. Kincaid lived to see it.

Then, a few years ago, I was fishing with some friends from the north wintering at Sebring, Florida. One of them, an owner of the largest laundry in Fall River, Mass., said to me one day: "I don't know what we at Fall River are going to do—we are losing all our cotton mills—they are moving to the cotton fields."

During all this period I read the MANUFACTURERS RECORD and know it was hammering into the consciousness of northern folks the great opportunities in the south.

And—just to finish the story—I told the gentleman from Fall River that to take the place of the cotton mills they were losing, they would develop a multitude of small plants manufacturing useful articles of raw materials closer home. Then a few years later I saw a newsreel showing the Amoskeag Mills buildings being subdivided into small units, shops and other small industries.

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for In



For Const  
interior  
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For Prod  
hoods, h  
purpose

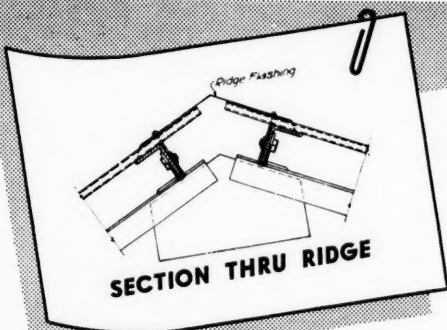
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Low Cost  
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The RUBB





# Famous for Quality CONSTRUCTION

Types of Businesses Now Using Allied Steel Buildings:

**ALPHA DEHYDRATORS ASPHALT PLANTS CANNERIES CARBON BLACK PLANTS  
COTTON GINS COTTON OIL MILLS MACHINE SHOPS OIL REFINERIES**

If you own a business that will grow, Allied Steel Buildings are for you. They may be lengthened or shortened by merely removing an end and then adding or removing the desired number of sections.

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Write for Our Catalog

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## USE STONEWALL for Industrial Construction and Production



- ✓ Fireproof
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- ✓ Needs No Painting

If your structure or product must resist fire, rust, rot or corrosion, Stonewall board is the answer. Made of imperishable asbestos-cement, this versatile building material has an almost unlimited number of uses—indoors or out!

**For Construction.** Stonewall makes strong, durable exterior and interior walls or partitions—they can't rot or decay, are easily cleaned, need no painting!

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**Easily worked** and handled. Stonewall comes in big, 4' x 8' sheets that are readily sawed, scored, drilled and nailed.

**Low Cost.** Stonewall is not expensive—and its ease of handling and its durability mean added savings for you!



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STONEWALL BOARD**

Write for sample and Industrial Bulletin "C"

The RUBEROID Co., Baltimore 24, Md. • Mobile 8, Ala.

## WANTED SUBCONTRACT WORK

Backed by 40 years' experience in sheet steel product designing and engineering, plus improved fabricating and producing methods and equipment—DIXIE offers you better finish—dependable performance—delivery schedules as contracted.

Let us bid on part of your present contract—no product too large or too small.

**DIXIE  
SHEET STEEL FABRICATORS**

Here at DIXIE are experienced product researchers — designers — engineers — skilled sheet and stainless steel operators—the DIXIE precision equipped plant with automatic machines—modern assembly lines.

**DIXIE  
DUST COLLECTING SYSTEM**

The DIXIE AIRengineered Dust Collecting System is designed for specific operations in any large or small plant for the control, removal or collecting of dust. What are your dust problems?

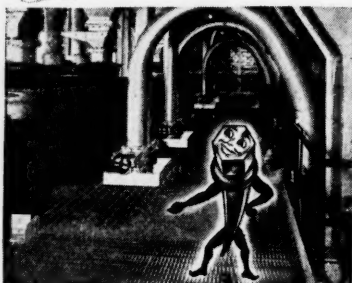
**DIXIE MFG. CO. INC.**

1312 Russell Street Baltimore 30, Maryland

## BATES • GRATES



fit into  
every plant  
picture



If yours is an application like this—with pipes, installations and stairways cutting into the area—BATES • GRATES give you neat, safe and strong open steel flooring.



Here's where BATES • GRATES win universal approval—a series of stairways combined with short walkways. Safety, strength and plenty of light and ventilation all the way down.

**YOU** can use BATES • GRATES for flooring any area or running any stairways. They serve to advantage in many ways: They are strong, safe, easy to maintain, durable, provide maximum light and ventilation.

The simple directness of BATES • GRATES engineering accounts for these advantages. The key is the Hex Cross bar "cemented" by a fillet-weld to stout main bars.

For open steel flooring and stair treads in your plant

... Get a Bid from Bates



## Saw Palmetto

(Continued on page 74)

saw palmetto, which grows wild throughout Florida. Owners of land probably would give a plentiful supply of the plant for the asking. Bulldozing it up by its roots should prove a not expensive item.

And saw palmetto, on a basis of experiments to date, has a finer fiber and seems to have more valuable by-products, containing even the dye with which the building material may be colored any desired shade from pink to red.

The cabbage palm, from which the stonelike building product also can be produced, is plentiful, too. Fifty years of "cooking" out whiskbroom fiber—a process which offends McCrary's sense of scientific economy as being wasteful—has not made too great a dent on the reserve of palms.

The real advantages of the cabbage palm, however, lie in its greater supply of lumber and in the fact that the cork content of its bark is of higher grade than saw palmetto cork. Palm cork is non-inflammable, impervious to water and can be sold

in granulated form and should find a ready market.

Mr. McCrary has designed machinery, containing a roller press and shredder, which he believes will separate the fiber and cark, running about 1,200 pounds to the ton of raw material, from the liquid content including the dye and tannic acid, which runs about 800 pounds. He also has chosen a plant site at Stuart, on the Florida cross-state canal system, in order to take advantage of water transportation.

He is organizing a company to manufacture the Palfibers and has been negotiating with financiers for some time in an effort to raise the \$50,000 he needs for a starter. Government financing, he said, will be available once he gets really under way with his project.

If all goes well, he believes that he can manufacture and sell his best material at a rate which would run construction costs to \$4.50 per square foot of floor space, as compared with \$6 to \$8 for ordinary wood construction. And the \$4.50 covers the double wall type, with stone-hard inner and outer walls.

## Bedsread Boulevard

(Continued from page 39)

There was no candlewick yarn in those days: Instead, Catherine Evans used a single strand cotton, doubled to the required thickness to make a tuft. It took patience, and it required hard work. But it paid off.

Word spread rapidly of the beauty of these spreads, made by hand by a Georgia farm girl. Other sales followed. In a few years Catherine found herself an employer with many helpers working swiftly to produce tufted bedsreads to meet a growing demand.

Nevertheless, for two decades, the manufacture of tufted bedsreads remained strictly a home industry, although a growing one.

It was in 1921 that Mrs. G. M. Cannon, wife of a Dalton retail store operator, went to Cleveland, Ohio, to buy ready-to-wear for her husband's establishment. The head of the wholesale firm there, learning that she was from Georgia, told her that his wife on a recent visit to Texas had purchased a bedsread made by Miss Catherine Evans and that she and a group of her friends

had so admired the workmanship that they had ordered a number of additional spreads to be sold in their church circle.

Thus, quietly but importantly, was launched the industry that was to bring a veritable economic revolution to a sizable segment of the Southeast.

As a result of her conversation with the Cleveland wholesaler, Mrs. Cannon and a salesman, George Sorrick, decided to enter the tufted bedsread industry and to make it really pay.

Their first order was for 100 spreads.

Mrs. Cannon gave the spreads the name Colonial Candlewick Spreads, recalling that during Colonial days housewives made their own wicking for candles and used this same wicking for purposes of embroidery. This firm—first real commercial venturers into the field—became known as Cannon & Sorrick, distributors of Colonial Candlewick handmade bedsreads.

(Continued on page 82)

# MANUFACTURING SPACE

## FOR SALE OR LEASE

*At Mississippi Ordnance Plant*

**21 BUILDINGS** **GOVERNMENT OWNED SURPLUS PLANTS** **268,000 SQUARE FEET**

These facilities, a part of the ammunition bag loading plant, known as Mississippi Ordnance Plant, were used during the war for manufacturing, warehousing and shipping purposes.

### LOCATION:

Approximately 26 miles from Jackson, on U.S. Highway Number 49, within the boundaries of Mississippi Ordnance Plant at Flora, Mississippi.

### BUILDINGS:

- A. Thirteen (13) warehouses, each 51 x 208, car door level, frame construction, asbestos siding, cement floor, roll roofing on sheathing.
- B. Manufacturing structure, 162 x 325, with cement block siding, oak flooring laid over floor sills set in rough concrete floor, roll roofing on sheathing.
- C. Two (2) buildings, 134 x 243 and 133 x 123, are 110 feet apart—a narrow Gate House connecting them is 6 x 110.
- D. A Railroad Shop, 336 x 52, and three (3) auxiliary buildings contain about 27,365 sq. ft.

All of the above buildings to be sold in whole or in major groups for use in place.

### CREDIT TERMS

for the purchase of these facilities may be arranged. If you can qualify as a small business firm you may make application for a priority for purchase through the Reconstruction Finance Corporation, which priority is second only to Federal agencies.

Final written proposals for the purchase or lease of Mississippi Ordnance Plant, Flora, Mississippi, will be received by the War Assets Administration at 7020 Franklin Avenue, New Orleans, Louisiana, until 2:00 P.M. C.S.T., December 18, 1946, at which time and place proposals will be publicly opened and read. Specifications for the content of these proposals may be obtained from any War Assets Administration Regional Office.

Information contained in this advertisement is not intended as a basis for negotiation. War Assets Administration reserves the right to reject any or all proposals.

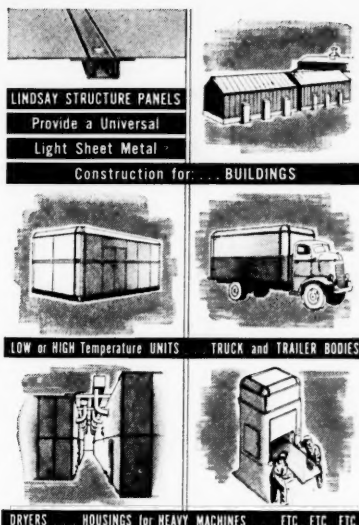
All specific requests for information and all proposals should be addressed to:

## WAR ASSETS ADMINISTRATION

OFFICE OF REAL PROPERTY DISPOSAL

7020 FRANKLIN AVENUE, NEW ORLEANS, LOUISIANA

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Investigate Lindsay Structure.

The Lindsay Corporation, 1102 Candler Bldg., Atlanta, Ga.

## LINDSAY STRUCTURE

U. S. Patents 2017629, 2263510, 2263511  
U. S. and Foreign Patents and Patents Pending

THE MODERN METHOD OF LIGHT METAL CONSTRUCTION

## \*NEW TYPE HOMES\*

### Made from Florida Palmetto

A new building material has been discovered.  
Unlimited supply of raw material.  
No Government restrictions, no priority.

Non inflammable; will not decay; termites will not attack; vermin proof. Will not rust.  
One or two stories, any number rooms.

### NO SUPERSTRUCTURE REQUIRED

No wood or steel from floor to roof.  
Palmetto cork and fiber high in insulating Quality.  
Palmetto tile marbled or imitation wood made in any color. No painting.

### MECHANICAL and SCIENTIFIC

An Architectural Vision.  
Storm proof, roof tied to foundation.  
Cost less than wooden building same type.

\* PATENT PROTECTED \*

### FLORIDA PALMETTO PRODUCTS COMPANY

215 South Florida Ave. Lakeland, Florida





## "...RIGHT DOWN OUR ALLEY!"

Your plans for industrial expansion, for strategically located distribution centers, must be based on a complete, orderly array of facts. Half-way measures and assumptions won't do—you need the whole story.

Other manufacturers and distributors have been faced with this need for complete information concerning plant sites throughout the forward-looking Southeast. Many have found the answers to their problems by consulting the Industrial Department of the Seaboard Air Line Railroad.

*Such information is "right down our alley!"*

For Seaboard is part and parcel of the Southeast . . . it knows local conditions as only a neighbor, a co-worker, can know them . . . knows the kind of data you require regarding available sites adjacent to modern railroad facilities, accessible to raw materials and sources of labor. This can be supplemented by on-the-spot reports covering your specific requirements.

You incur no obligation by writing us, and of course your inquiry will be held in strict confidence. Simply address:

Dallas T. Daily, General Industrial Agent  
Seaboard Air Line Railroad Company, Norfolk 10, Va.



## LETTERS

MANUFACTURERS RECORD,  
Baltimore, Md.

For a good many years I have been reading your editorials and was particularly interested in your last issue "Rubber Dilemma".

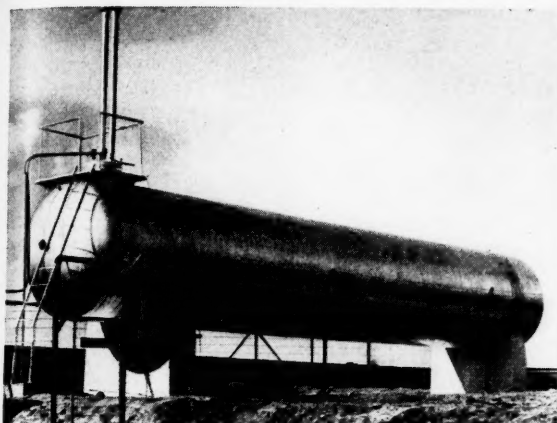
I was born in the South, my people lost everything they had. My mother lost two brothers and the same applies to my father, so my first vote was democratic, but I think God will forgive me for that because I did not know any better, yes it is "good to be from the South".

Now about rubber: Not so long ago I sat on a farmer's front porch and looked across his field of corn, truly a beautiful sight. I told the farmer that the day would come when his corn would find new markets, that his corn would make automobile tires, that's as it should be and could be, but will not be, simply because of the Peppers, Bilbos, Talmages and others who want to be elected "again and again". My honest opinion is that the South has produced only two real statesmen in 70 years, namely, Byrd and Garner. Yes as a life-long republican I would vote for either of them in preference to anything the republicans will produce at the next election.

A few years ago I was driving through the State of Georgia over Route No. 1. My wife and I were discussing the abject poverty of the people who lived along the route—no fences, no lawns, unpainted houses, people barefooted, wandering along the road, one mule hitched to a wagon loaded with negroes going to town to buy "fat back" and corn meal; a chicken flew across the road, I slammed on the brakes on a dry concrete road and threw my wife into the windshield. She screamed and asked why I did slam on the brakes in a dangerous manner. My answer, "I didn't want to kill the only —ed chicken in Georgia".

Not so long ago I visited a small rubber factory in North Carolina and was discussing the labor situation with the manager. Out of about a hundred employees I had observed one negro workman. He was a powerful man and was doing as much work as any two whites, but that negro was paid only 40c per hour, while the whites were paid 60c per hour. Answer, that's the custom and "the people of the town would resent my working too many negroes", so this little rubber company did nothing to solve its labor problems and so enters the C. I. O.

If the South is ever to raise its standard of living it must stop talking about its negro problem. The South must industrialize and produce cheaply, it must do something about freight rates and reflight "The Yankees" in the markets of America and of the world. To begin, start with the schools, use the country newspaper, the radio, instead of being proud of the South be ashamed of it, realize what your problems really are and get rid of your ignorance and prejudice. The South has some of the finest land in the whole world but "Tobacco Road" told the story only too well. Yes it is good to be from the South.



15,000 Gal. Propane Capacity Tank 8' 0-1/16" I.D. x 50' 5-1/4" Long

## Lancaster

Lancaster fabricated steel plate products are widely known for quality design, fine workmanship and reasonable cost. We can furnish: pressure vessels, elevated tanks, process tanks, autoclaves, standpipes, retorts, extractors, sprinkler tanks, stacks, breechings, bunkers, large O.D. piping, ships, barges, dredges, dredge pipe, etc.

Consult Lancaster's experienced engineers for your fabricated steel plate needs. Complete designs and estimates will be furnished promptly. Write, phone or wire today.

**LANCASTER IRON WORKS, INC.**  
LANCASTER, PENNSYLVANIA

## Planning Improvement in your WATER DISTRIBUTION SYSTEM?



Then it will pay you to investigate Cole elevated tanks, which have been satisfactorily assuring an adequate supply to American cities for over 75 years.

Capacities 5,000 to 2,000,000 gallons, with hemispherical, ellipsoidal or conical bottoms. Also, flat tanks for storage of butane or propane gas. Correctly built, in accordance with ASME specifications.

We invite your inquiries. State capacity, height to bottom and location.

**R.D. COLE MFG. CO.** ESTABLISHED 1854  
Newnan Ga.



TANKS



TOWERS



CYLINDERS



VESSELS

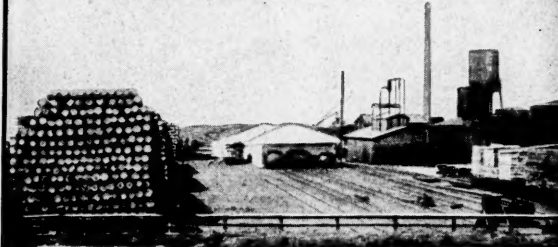
## CREOSOTED

Piling, Poles, Lumber, Cross Arms,  
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Also Wolmanized Lumber

Decay and Termite Proof—Can Be Painted

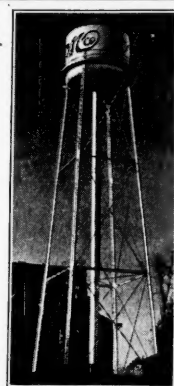
Docks for Ocean Vessels



**American Creosote Works, Inc.**  
New Orleans, La.

**Atlantic Creosoting Co., Inc.**  
Norfolk, Savannah, New York

Plants at: New Orleans; Winnfield, La.; Louisville, Miss.;  
Savannah, Ga.; Jackson, Tenn., and Norfolk, Va.



## SOUTHLAND PRODUCTS

—WELDED OR RIVETED—

We now manufacture and offer to the trade tanks in all sizes for pressure or gravity work. Also other steel equipment of either

WELDED OR RIVETED CONSTRUCTION

This applies to field as well as shop built equipment

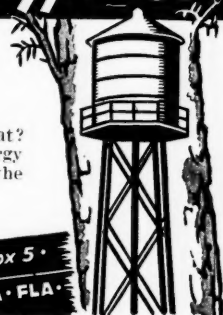
Write us for information and quotations

**Chattanooga Boiler & Tank Co.**  
CHATTANOOGA, TENN.  
TANKS

## DAVIS Cypress TANKS

Then What?

Install a Davis tank. Then what? Well, spend your time and energy on other plant details, for the tank will take care of itself. Questions answered.



**G.M. DAVIS & SON** • P.O. Box 5 •  
PALATKA, FLA.

## Bedspread Boulevard

(Continued from page 78)

The wife of a dentist who bought one of the spreads persuaded the fabulous John Wanamaker to try half a dozen of those made by Catherine Evans. Thus they were introduced to New York. It was the "rage" which followed that awakened the menfolk of the Georgia community to the commercial possibilities.

A Dalton freight agent quit his job quickly to begin manufacturing tufted bedspreads in a spare room in his own home. Not long ago his business had soared to more than a million dollars a year. A Dalton housewife began production in the backyard of her residence with only one other woman to help her. Later she enlisted the help of her husband and organized the J. T. Bates Company, which, not long thereafter, moved into permanent quarters with more than 300 employees.

From then on, progress was rapid. In nearby Calhoun, Georgia, a den-

tist gave up his practice to devote his entire time to bedspread manufacture when his wife's income from doing just that surpassed his own. He started in a single room in his home: By 1939 he was shipping 12,000 candlewick bedspreads at a time to wholesalers. In 1922, two sisters, Miss Mamie Redwine and Mrs. Etta Strain, hired six employes and began making bedspreads. Soon they were employing well over 200 persons. Another Daltonian who began bedspread manufacturing in a single room with the help of four employes saw his business grow to such an extent that four years later he occupied a building with 35,000 square feet of space and had 450 employes on his payroll.

And so the industry grew until today, according to Henry C. Ball, executive director of the Tufted Textile Manufacturers Association, there are approximately 400 plants in 24 states with 25 machines or more making tufted chenille products. About 75 per cent of the total production, however, is within a 125 mile radius of Dalton. Here is a

Southern-born, Southern-matured, Southern-concentrated industry.

If the women started this industry, the men saved it by mechanizing it. The first chenille machines were developed early in the 1930's to overcome price and demand problems. Today these machines can turn out more tufting each than can several hundred hands.

Some idea of the tremendous growth and importance of the industry is given by Mr. Ball in a special report he compiled for MANUFACTURERS RECORD. In 1940, the total dollar volume of the industry—including bedspreads, rugs and robes—aggregated \$23,532,307. In 1941, the dollar volume climbed to \$29,256,498. This year, the industry did a \$28,532,148 business in the first quarter and \$32,314,227 in the second. For the full year, Mr. Ball estimates total dollar volume will approximate \$121,692,748!

From a handful of employes in its infancy, the tufted textile industry grew to 9,840 in 1940, soared to 18,725 during the second quarter of this

(Continued on page 84)

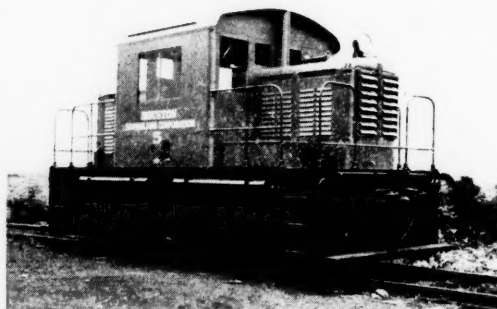
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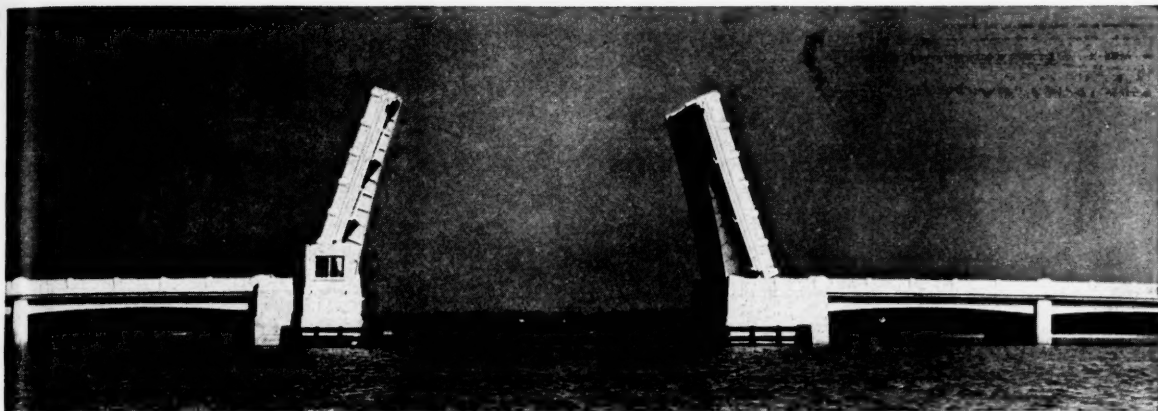
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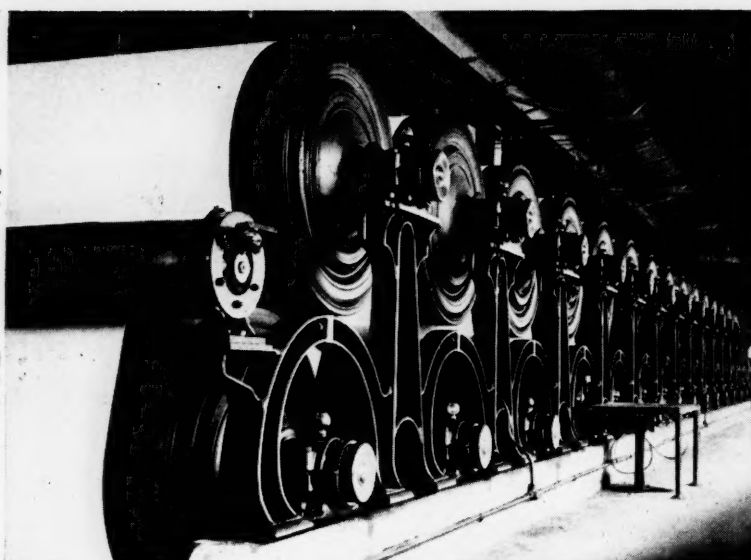
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## Bedspread Boulevard

(Continued from page 82)

year and will level off at the year's end to about 18,056. Of the total dollar volume this year, the tufted bedspread division will do about \$69,055,468, the rugs division about \$30,660,676, and the robes sector about \$21,995,256. Employment this year will average about 11,024 in the manufacture of bedspreads, 3,322 in production of rugs, 3,678 in the making of robes.

The Tufted Textile Manufacturers Association also estimates that by the year's end, the industry will have turned out the staggering total of 23,757,656 units, including 10,402,040 bedspreads, 8,233,760 rugs and 5,121,856 robes—a 201.65 per cent increase over 1940!

Moreover, in 1940, this industry operated a total of 14,583 needles: This year it will have operated 35,692—a 145 per cent gain over 1940. It will have, at the year's end, an estimated 20,200 needles available but not in operation.

The high cost of raw materials and labor have, of course, been factors in the increase in dollar volume and also have accounted chiefly for the increase in prices of tufted chenille products. But while dollar volume and price increases have resulted from federal controls, the profit margins of recognized factories in the industry have remained approximately the same.

Actually, the chenille industry has had its greatest expansion during the last five or six years. Today one finds on the market not just chenille bedspreads, robes and rugs, but tufted textile bathmats, seat covers, beach and sports wear, draperies, crib spreads and numerous other items to add enjoyment to living. Laundries have been erected to wash and fluff the chenille products—a task once performed by hand. During the early years of bedspread manufacturing only white yarn was used. Today dye plants have sprung up, and combination colors have become popular. Designs have undergone a radical change, but here again labor costs play an important role and tend to keep them conservative. Gaudy colors, however, and lavish designs have given way to delicate pastels

(Continued on page 86)



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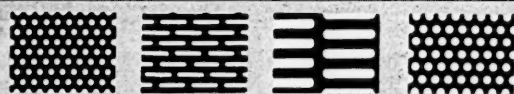
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## Bedsread Boulevard

(Continued from page 84)

and simplicity in good taste. Dip dyes have supplanted piece dyes,

and the quality and texture of the cloth have been improved.

For more than a century until about 1850, tufted bedsreads had been made on Southern plantations.

But the art became lost from the middle of the Nineteenth Century until Catherine Evans revived it.

"Bedsread Boulevard" sees a continuing demand for its products with a permanent market assured for chenille rugs, bedsreads and rugs. But there are other fertile fields. Chenille toys, for example, are growing in popularity. And machinery refinements are expected to reduce costs, now that government controls have been abandoned.

The versatility of the industry was evidenced during the war. Plants in Georgia and elsewhere turned out barracks bags, airplane wing covers, shelter halves, bomb parachutes, WAC uniforms.

Today the industry, beset like many others with a wartime influx of "fly-by-night" plants, is becoming stabilized. The undesirables are being weeded out. The industry probably will level off to about 200 factories and will be in a better operating position than at present because those factories will be strong, with a merchandising "know how," an experience with distribution and merchandising and a background of designing, styling and workmanship.


The Tufted Textile Manufacturers Association for the last year has been conducting an extensive educational program through the American Institute of Laundering at Joliet, Illinois, educating the 6,000 laundries throughout the nation as to the proper manner of refreshing and laundering tufted products. This program now has been extended to manufacturers of home washing machines and even the housewife herself. The association has done much to aid the industry, particularly in the face of government controls.

In January, 1945, the industry was completely closed down by the government as a result of its order freezing all yarn and sheeting. It was the Tufted Textile Manufacturers Association which pointed out to government agencies the true facts in the tufted textile industry and thereby enabled a resumption of its operations. More than 400 persons attended the first annual convention of this association at Look-out Mountain, Tennessee, last year. President of the association is R.

(Continued on page 88)

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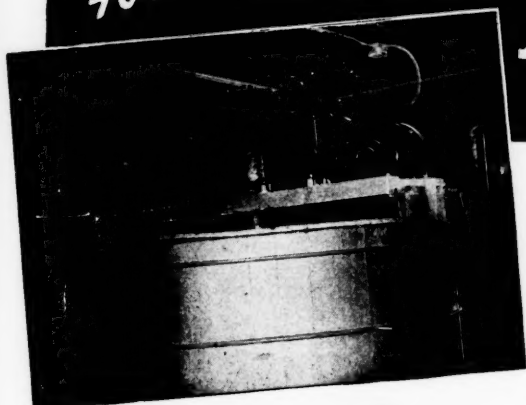
Square edge bars for safe footing.  
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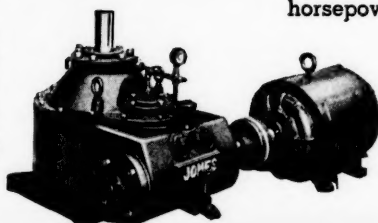
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The new Jones Bulletin No. 75 covers complete details on these new Worm-Helical Speed Reducers, with rating tables, dimension diagrams, torque charts and other application information. We shall be pleased to send you a copy.



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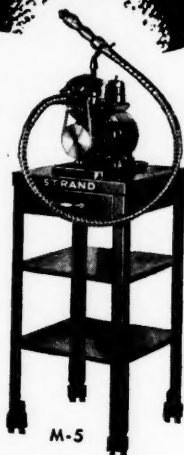
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## Bedsread Boulevard

(Continued from page 86)

Carter Pittman, of Sparks-Pittman Company, Dalton.

All signs now are hopeful for the industry. Multi-needle machines are beginning to appear in increasing quantities. The latest type is one of 185 needles which will accommodate an entire large-size bedspread, and with its use five men can turn out 800 chenille bedspreads daily, excluding overlays.

There are many names in the industry of plants which have shown

amazing growth during recent years. These include Redwine and Strain, Inc., of Dalton; Mount Alto Bedspread Company, Inc., at Calhoun, Ga.; J. T. Bates Candlewicks, Dalton; G. H. Rauschenberg Company, Dalton; Candlewick Yarn Mills, Dalton and Cartersville, Ga.; Cabin Crafts, Inc., Dalton; Sparks-Pittman Company, Dalton; Wintuft Corporation at Ringgold, Ga., and Blue Ridge Spread Corporation at Dalton—to mention only a few.

How Dalton itself feels about this relatively new industry, conceived

by its womenfolk and executed by its men, is reflected in this eloquent comment which appeared in the *Dalton News*:

"Enough people find employment in Dalton to compose an army, the products of whose hands reach around the earth; enough thread is used to hemstitch the Milky Way; the cloth used is sufficient to make a tent large enough to accommodate a sideshow for the Seven Stars, and in as many colors as will be required to embellish beautiful sunsets for an Indian Summer."

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Industrial Plants

Sugar Mills

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... NOW **25%** *average* B



#### TYPICAL CASE—

### MILLING MACHINE

Here is how War Assets Administration's new price has been set for a typical machine; Model 2K Kearney and Trecker Milling Machine, vertical knee action; War Assets Administration S.C. Code 3417-23-20-28.

Price (New).....	\$7,054.00
Previous W.A.A. Sales Price (based on depreciation primarily).....	4,091.00
Average Market Value.....	2,556.00
New W.A.A. Sales Price....	2,045.00
Available for rebuilding....	511.00

Sales to priority claimants, which include Federal Agencies, Certified Veterans, World War II, and subsequent priority claimants, will be made in proper sequence as required by law.

### 31 TYPES OF GENERAL PRODUCTION TOOLS REPRICED

Boring Machine—Horizontal, Precision, Bridge Type, Single and Double End  
Chuck Machine—Automatic, Vertical, Multiple Spindle Type

Chuck Machine—Single Spindle Automatic, Horizontal Turret Type Machine

Chuck Machine—Six Spindle Automatic, Horizontal

Drilling Machine or Drill Press—Bench or Floor, Single or Multiple Spindle

Gear Cutting Machine for Straight Bevel Gears, (Not Planer Type)

Gear Hobber—Horizontal

Gear Hobber—Vertical, Universal

Gear Shaper—For External Spur Gears Only

Gear Shaper—For Spur Gears, External or Internal

Gear Shaper—For Spur and Helical Gears, External and Internal

Gear Tooth Shaver—For External and Internal Gears (Rotary Type Machine)

Gear Tooth Grinder—Generating Type, for Spur and Helical Gears

Gear Tooth Grinder—For Spur Gears, External and Internal (Formed Wheel Type Machine)

Grinders—Centerless

Grinder—Crank Pin Grinders

Grinders—Plain External Cylindrical Grinder

Grinder—Internal, Cylindrical, Automatic Sizing

Grinder—Internal Cylindrical (Hydraulic Feed Machine)

Grinder—Internal Cylindrical, Hydraulic Feed, for Hole and Face Grinding

Grinder—Surface, Rotary Table Type

Lathe—Multiple Tool, Not Automatic, Manufacturing Type Production Lathe

Milling Machine—Automatic and Manufacturing Knee Type

Milling Machine—Plain Bed Type, Horizontal Spindle Machines

Milling Machine—Vertical, Knee Type (Not Including Bench Type)

Polishing and Buffing Machine—Bench and Floor

Profiling Machine—Vertical, Fixed Bed Type, Single and Multiple Spindle

Tapping Machine—Vertical, Single or Multiple Spindle

Thread Grinding Machines

Thread Milling Machine

Turret Lathe—Ram Type, Plain and Universal

**MACHINE TOOL  
SALES DIVISION**

# BELOW MARKET

## NEW "FIXED PRICE" POLICY ESTABLISHED ON 31 TYPES OF SURPLUS MACHINE TOOLS

Here is good news indeed for the man who is trying to purchase general purpose production tools for replacement, reconversion or new enterprises. Now you can go into any of War Assets 33 Regional Offices, any machine tool site sale in the United States, or any approved War Assets Administration dealer and buy at the same fixed price, everywhere, the tools in these 31 groups listed at the left. No waiting for complicated figuring of prices, checks against priorities or other delaying factors. The tools are available in such quantity that your purchase can be cleared on the spot, and immediate delivery arranged.

But even more important is the principle under which the new low prices have been set. As the scale at the right indicates each price takes into consideration your costs of rebuilding the tool to new condition, engineering, service, etc. It is set well below the current market price for similar equipment sold on a full service basis. The differential is approximately 25% below market—enough for men with tooling "know-how" to realize a neat "extra" profit and at the same time acquire modern machine tools.

Plan now to check at once the detailed price and specifications list—now available in every War Assets Administration office (machine tool sales division) and the offices of your approved W.A.A. machine tool dealers.

### FOR DETAILED PRICE CATALOG —WRITE, WIRE OR PHONE:

#### 1. Your Regular Machine Tool Dealer

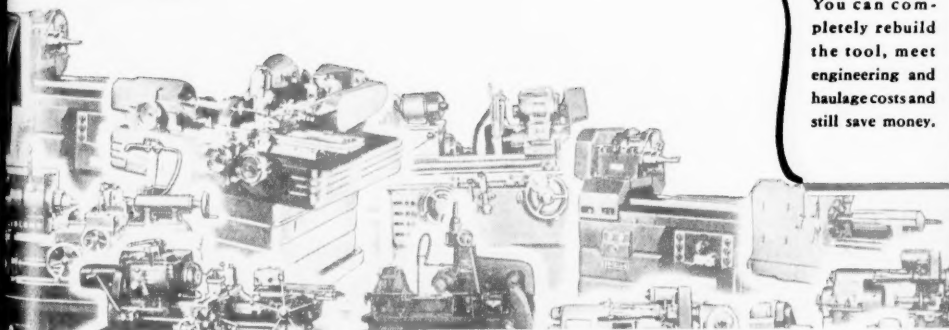
War Assets Administration has appointed more than 3,000 "approved" dealers throughout the U. S.

#### 2. W.A.A. Machine Tool Sales Division

In any of the 33 War Assets Administration Regional Offices listed below.

#### EXTRA PROFIT AREA

For Alert Buyers  
With Tooling  
"Know-How."  
You can com-  
pletely rebuild  
the tool, meet  
engineering and  
haulage costs and  
still save money.



686-1

## W.A.A.'S NEW PRICING PRINCIPLE

ORIGINAL COST



DEPRECIATION  
BASED PRIMARILY  
ON TIME



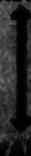
PREVIOUS  
W.A.A. PRICE



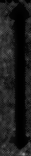
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MARKET VALUE



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## 4 ONLY Power Ballast Screening Machines

Equipped with  
Leroi 4-cylinder, 16 Horsepower  
Gas Engines  
Approximate Weight 4,850 Pounds  
each  
Length approximately 37 feet each

*These machines are being offered  
subject to prior sale and  
final approval of management*

The machines are located at  
PARSONS, KANSAS  
and inspection can be  
made by calling upon

**GENERAL STOREKEEPER  
C. E. BULKLEY**

*Inquiries or offers should be sent to  
S. A. HAYDEN, Purchasing Agent  
RAILWAY EXCHANGE BLDG., ST. LOUIS, MO.*

**Missouri-Kansas-Texas Lines**

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Machine Tools of All Kinds, Pipe Machines, Punches, Shears, Welders, Presses and Forging Equipment.

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Turbo Generators, Engine Generators, Diesel Engines, Boilers, Blowers, Motor Generator Sets, Electric Motors, Air Compressors, Pumps, Heaters, Complete Power Plants.

THOROUGHLY Reconditioned and Tested

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Everything from a Pulley to a Powerhouse

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PHILADELPHIA'S LARGEST MACHINERY DEALERS AND EXPORTERS

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### LINK BELT CONVEYER 20" SYSTEM COMPLETE

300 FPM. cap. 100 ton per hour ultimate.  
Separately housed coal crusher to ¾".

Section #1:

167' at 16° from minus 10' to plus 36' elevation.

Section #2:

172' from 26' to 60' elevation.

Section #3:

160' travel over bunkers, belt tripper.  
Standard conveyor sections with all supporting steel, controls, motors, etc.

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1704 UNION TRUST BUILDING  
CINCINNATI 2, OHIO

## Specializing In MACHINE TOOLS Largest New York Stock

Send us your inquiries

**AARON MACHINERY  
COMPANY, INC.**

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### MACHINE TOOLS

Bolt Threader 1½" National 2-spindle  
Drill Press 21" 2-spindle B.D.  
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Over 100 Machines in Stock

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1—(New) 300 G.P.M. Goulds, Size 2.  
Fig. 3460, 145 lbs. Press. 3" S., 2" D.:  
50 H.P. 3 ph., 3600 RPM Motor.

8—(New) 30-85 G.P.M. ALL BRONZE  
Worthington Monobloc, 30-87" Head;  
3 ph., 3600 RPM, Totally Enclosed  
Motors.

ALL ABOVE IN OUR STOCK FOR  
PROMPT SHIPMENT.

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## Modern AIR COMPRESSORS

ALL TYPES AND SIZES

Correctly Rebuilt

Guaranteed

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## POWER PLANT

3—250 H.P. each, Kewanee horizontal  
return tube, self-contained boilers,  
A.S.M.E., 125 # pressure, with individual stacks, Riley stokers, pumps, feed water heater, valves, piping, etc. All the above installed new 1943, still in original location in Virginia.

Immediate inspection and delivery.

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### STEAM PUMPING ENGINES

- 1—Allis-Chal. 4 mgd. cr. com. cond. Size 12x28x13x24. Fine cond.
- 1—Snow 6 mgd. C&FW Cr. Com. Opp. Type Cond. 20—40x14½x36, with waterworks type cond.
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- 1—Snow 8MGD C&FW cr. Com. Opp. Type Cond. 26x54x17x36, with waterworks type condenser.

### PUMP VALVES

Birch Valves for all types of reciprocating pumps.

**BIRCH MANUFACTURING COMPANY**

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## FOR SALE

## PUMPCRETE

machine, Model 150 single, with remixer and auxiliary equipment including 40 pieces 10' pipe; four 5'; one 3', one 2', three 90 deg. ells, two 45 deg. ells, three 22½ deg. ells, one 11¼ deg. ell.

All in first class condition. Recently equipped with new valves and cylinders. Runs perfectly.

**B. C. SKINNER MACHINERY  
COMPANY**

Dunedin, Florida

One (1) Allis-Chalmers 8/6 two-stage centrifugal pump, rated at approximately 850 GPM against 290 ft. head. 1760 RPM speed. Driven by 150-HP, Allis-Chalmers, 3-phase, 60 cycle, 2200 volt motor, with a Westinghouse manually operated auto-transformer type starter, 3 fused cut-outs, and 3 lightning arrestors. Price f.o.b. Macon reasonable and furnished on inquiry.

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City Hall

Macon, Georgia

## FOR SALE

## Surplus Equipment

1—Progressive Welder Co. #126-DS-26A Portable welding gun.

1—75 KVA Transformer, 550/60 I set Controls and Timer for above.

1—A-I-R Onsrud Single Radial Arm Router, 84" reach.

Complete with standard equipment.

1—4 KW Frequency Changer with controls for above.

Both used about 1 year and in excellent condition.

For Full Information Write or Call

**HEDSTROM UNION CO.**

Fitchburg, Mass.



# AIR COMPRESSORS:

Elec.: 676, 1300, 1378, 2200 & 2850 Ft.  
Bltd.: 368, 540, 676, 870 & 1300 Ft.  
Diesel: 105, 368, 425, 603, 900 & 1300 l.  
Gasoline: 110, 220, 315, 415 & 500 Ft.  
Steam: 150, 368, 540, 1500 & 1958 Ft.

# R. R. EQUIPMENT:

175-8000 & 10,000 Gal. Tank Cars.  
200-40 & 50 Ton Flat Cars.  
4-65 Ton Whitcomb Diesel Locos.  
60-50 & 40 Ton Gondolas.  
6-20, 25, 30 & 40 Ton Loco. Cranes.  
8 ton Plymouth 36 ga. Gas Locomotive.  
12 ton Porter Std. Ga. Gas Locomotive.  
2-50 Ton 6 wheel switcher.

# STEEL TANKS:

35-10,000, 15,000 & 20,000 Gal. Cap.  
25-1,000, 5,000 & 65,000 Bbl. Cap.

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# Liquidating and Dismantling Several Large Ocean Going Vessels

Diesel engines; steam boilers; pumps; winches; electric motors; generators; pipe; valves; fittings; miscellaneous ships' machinery and equipment.

Representative on premises — INSPECT —  
Write for detailed list.

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Blakely Island  
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Motors, A.C. and D.C., 1/4 to 150 H.P.  
Transformers, 1 KVA to 100 KVA. Air  
Compressors; Belting; Blowers; Circuit  
Breakers; Belt Conveyors; Crushers;  
Drills; Fans; Generators; Grinders;  
Hoists; Lathes; M-G Sets; Electric Locomotives;  
Mining Machines; Pumps; Reels;  
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Tipple Equipment; R.R. Switches, 100#  
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Clam Shell Bucket, single line, 1 1/4 yd.  
Speed Reducers, 100 HP. & 250 HP.  
Radial Drills 4' and 6'.  
Pile hammer #6, McKiernan-Terry, operated  
by steam or air.  
Pulsometer #6R, size 3 1/2" N.Y.E.

Guyana Machinery Co., Logan, W. Va.

# AC. DIESEL SETS for Sale

150 KW. Buckeye plant, 480 v. A-1  
160 KW. NEW plant, Hercules, 240 v.  
175 KW. Atlas 514 RPM 240/480 v., A-1  
200 KW. Buckeye 514 RPM 240/480 v., A-1  
240 KW. Fairbanks, model 32, Good

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## NEW-REBUILT STATIONARY

## REBUILT PORTABLES

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We have, for prompt shipment, several attractive items of GOOD USED power plant equipment—boilers, engines, turbines and generators. Write us for details if you are in the market.

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1600 Ft. Sullivan Air Compressor, new 1943.  
25 ton Orton Locomotive Crane, new 1942.  
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- 1-60 KW Direct Current 120 Volt Generator, d/c to 6 Cyl Cummins full Diesel engine.
- 1-5 KW new ONAN 120 Volt AC 1 Phase Generator Set, gasoline engine driven.
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- 1-DH2 DEAN HILL Steam Turbine, 45 HP, 3000 RPM, 133# steam, 0# Exhaust.
- 1-GRUENDLER Hammer Mill, Rotor length 24", Hopper opening 22 1/2" x 16 1/2". Grate bars set for 1/2" grinding.
- 1-JEFFREY Hammer Mill, Rotor length 18", Hopper opening 18" x 13 3/4". Grate bars set for 1/2" grinding.
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- 7-New MILWAUKEE Heavy Duty 1/2" Drills, 115 Volt universal motors.
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Lots of other hard to get items.

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# WANTED STEAM ENGINES

- 1-26" x 48" Simple Corliss Slow Speed Engine, Allis Chalmers Left Hand Preferred.
- 1-30" x 60" and
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- 1-200 HP Westge, 440-3-60-900 RPM Motor
- 1-125, 200, 250, 600 & 800 HP Slip Rings
- 2-125 HP ASME 200# Loco. Type Boilers
- 2-150 HP, 150# ASME H. R. T. Boilers
- 2-Belt Conveyors, 1-35 & 7 1/2 HP Drive
- 2-25 HP Grand New 220 V. 1750 RPM Motors
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H. & P. MACHINERY CO.,  
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## WORTHINGTON TRIPLEX PUMP

4" x 6", 60 G.P.M., 200 #

All Condition

MID-CONTINENT COAL AND COKE CO.

Sturgis, Kentucky

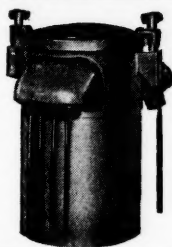
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Power plant equipment. Steam, Diesel, electrical, boilers, engines, turbines, generators new or used.

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## TRANSFORMERS WANTED

in operating condition or burnt out. Mail us list giving complete nameplate data and stating condition.

We Rewind, Repair and Redesign all Makes and Sizes  
ALL TRANSFORMERS GUARANTEED FOR ONE YEAR

Prices quoted on request.

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STATION M

Since 1912

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BARGAIN!

## 800 K. W. WESTINGHOUSE M. G. SET

MOTOR: 13,200 V., 3 PH., 60 CY.,  
1150 H.P., 514 R.P.M.

GENERATOR: 230 V. D.C., 800  
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Three bearing machine on common bed-plate complete with A.C. starting panel and D.C. operating panel.

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# OIL ENGINES FOR SALE

- 1-Fairbanks, Morse, 2 cylinder, 120 Hp, 257 RPM, direct connected to 2300 volts, 3 phase, 60 cycle generator;

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Both can be seen at the address below, and either or both can be bought at a bargain, for immediate delivery.

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Riverside Plant,

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# PROMPT SHIPMENT INDUSTRIAL TRUCKS

- 3-Automatic type LO-5 Low Lift Trucks capacity 5 ton, platform type.
- 7-New Yale & Towne, 4 ton capacity, Hydraulic Hand Lift Trucks, platform type.
- 1-3000 lb. Yale and Towne high lift truck.

DUQUESNE ELECTRIC & MFG. CO.  
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Sodium Zeocarb—Acid Treatment—Precipitators—Filters—1000 gallon per minute—

Will be expertly dismantled for re-erection.

—includes all meters, valves, electro-chem controls, Spaulding Precipitators (steel), recorders, gravity filters (steel), Permutit softeners, and tanks for mixing, dissolving, feed, storage, etc., flush pumps, drive pumps, motors, piping, etc., plus large quantity chemicals.

Complete—Modern—Available Now

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We have a large quantity of alloy deformed reinforcing bars of extra high grade qualities. We are interested in orders for 50 tons and up in diameters 1/2" to 1 1/4".

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80—4,200 Gal. Cap. 9'2" x 8' Vertical  
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60—21,000 Gal. Cap. 21'6" x 8' Vertical  
15—21,000 Gal. Cap. 15' x 16' Vertical  
100—42,000 Gal. Cap. 21'6" x 16' Vertical  
30—42,000 Gal. Cap. 29'8" x 8' Vertical  
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**L. M. STANHOPE**

ROSEMONT

PENNA.

## FOR SALE

STEEL: Flat Machine, Round Machine, Round Molex, Round Maxel, Flat Nigger Bar, Flat Hog Anvil, Round Rivet, Flat Spring, Flat Tong, Flat & Round Tool, Flat & Round Swedish.

Machine Bolts, USS Hex Nuts, USS Hex Cap Screws—all new.

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FIRE PUMPS: 1000 gal. Worthington; 500 gal. Buffalo — 3-stage Pennsylvania Centrifugal—552' Head.

Various sizes Steam Traps, Pulleys, Boxes and Sprockets.

Write for quantities and prices.

**WILSON CYPRESS COMPANY**  
PALATKA, FLORIDA

## FOR SALE

Several heavy duty, reconditioned dryers, sizes 7' x 60', 6 1/2' x 60', 5 1/2' x 35', 5' x 40'. Also a number of kilns, 7' x 60', 6 1/2' x 65', 5' x 50' and 4 1/2' x 40' and 8' x 100'. Raymond mills, jaw crushers, ball and tube mills.

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Wood Frame—Aluminum Corrugated Covering  
Sizes—20'x49'4 1/2"x7'10" sidewall  
24'x59'1 1/2"x7'10" " "  
50'x88'4 1/2"x10'9" " "

Shipments from Southern plant—10 days

**A. JAY HOFMANN COMPANY**  
Prefabrications Narberth, Pa.

YOUR ASSETS and CAPITAL STOCK are WORTH MORE NOW

We are willing to

# PAY YOU CASH

For Your

• INDUSTRIAL PLANTS  
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We are principals acting in our own behalf. All transactions held in strictest confidence.

Personnel retained wherever possible.

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## Investment Opportunity

To separate estates, and account tax status of owners,

WOULD sell very sound, profitable, Three Band Saw Mill operation, with about 23,000 Acres timberland and standing timber, together with over 6,000,000 feet manufactured lumber. Some of the finest RED CYPRESS in United States. This is one of best operations in Southeast—advantageously located—now in operation.

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for sale . . . all kinds. Write for classification sheet. NO SERVICE CHARGE. Address:

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**VIRGINIAN BRICK AND TILE COMPANY**  
OF PRINCETON, WEST VIRGINIA

desires to sell its Brick and Tile plant, located on main line of Virginian Railroad, near Pocahontas-Virginian Coal Fields, in the industrial section of Southern West Virginia. Price \$100,000.00. Can easily be made to produce 5,000,000 brick yearly. Good shale; Good business; Great Opportunity. Reason for sale: Owners and Operators desire to retire.

Address: W. S. DANGERFIELD,

Secretary & Treasurer

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Approximately 3,800 acres Northwest Georgia land containing hematite iron ore, limestone and other minerals, timber. Situated between two railroads, near markets and furnaces.

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## Steel Fabrication

Open capacity for all types of steel fabrication. We have large tonnage of small angles which we will fabricate to your specifications.

Send Us Your Inquiries

**GLAZER STEEL CORPORATION**

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KNOXVILLE, TENN.

Phone 3-0738

FOR SALE

**6 ENCO OIL BURNERS**

with steel Fronts to serve 1000 H.P. nominal.

1—20" Turbo Blower, Wing.

**RUSSELL B. HOBSON & SONS**

Great Notch, N. J.

Quality and Service Since 1919

**BINDER COOPERAGE CO.**

WOODEN BARRELS — STEEL DRUMS

BOUGHT & SOLD

Prepared wood barrels and steel drums for all purposes.

N. W. cor. Delaware Ave. & Dickinson St.

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## Streptomycin Plant Operating in Virginia Valley

(Continued from page 44)

larger tanks.

When the organism reaches its last stage of growth in the 15,000 gallon fermenter tanks, filtration is started to eliminate the insoluble solids from the fermented broth. The streptomycin-rich filtrate is then mixed with activated carbon which absorbs the crude drug. This is the start of the complex purification process that leaves the crude but highly pure streptomycin.

The semi-finished material is then moved in uniquely-designed refrigerated containers to Merck's Railway finishing plant. Here the product is handled in air-conditioned, sealed rooms with dust-free, ultra-violet ray treated air. To avoid the slightest possibility of contamination the entire process is carried out under rigidly sterile conditions.

The final finishing step is accurate weighing of small quantities of the powdered streptomycin. This is done on delicate prescription balances in sealed cubicles. The vials, now filled with the precious drug, are then automatically sealed, wrapped and packaged for shipment.

Ground was broken for the Elkton plant of Merck & Co., Inc., in August, 1945, by Merritt-Chapman & Scott. Operation of the plant was delayed by the difficulty of obtaining materials. Announcement that the plant was in production was made in August, 1946.

The plant now employs approximately 175 workers but anticipates that more will be added as production increases. It is hoped that full-scale production can be achieved by the end of 1946.

Originally Merck streptomycin was sold to physicians at \$25 per gram. The present list price is \$20 per gram. It is anticipated that, just as with Merck penicillin, the cost of Merck streptomycin will be reduced as greater production permits lower costs.

At the present time all distribution is through the Civilian Production Administration to select depot hospitals throughout the United States.

## Preston S. Arkwright, Georgia Power Executive, Dies at 75

Preston S. Arkwright, chairman of the board of the Georgia Power Co., died December 2 at Emory hospital, Atlanta, after a short illness.

A Savannah lawyer who became head of the Georgia utility concern "by accident," according to his own statement, Mr. Arkwright led his company through an expansion program resulting in service to an area approximating 50,000 square miles.

Mr. Arkwright was elected president of the old Georgia Railway & Electric Co. in 1902, ten years later becoming head of the Georgia Railway & Power Co. when that company absorbed its predecessor and other utilities in Georgia. With organization of the Georgia Power Co. he became its president, serving in that capacity until Spring of 1945.

Mr. Arkwright was born February 24, 1871 at Savannah, the son of Thomas Arkwright, whose native English town of Preston provided his son's Christian name. His mother was the former Martha Stanley of Lancaster, Pa.

Early in life he observed that to be regarded as a gentleman in Georgia's coastal metropolis, "you must either be a planter or a professional man." This led him to his career in law. Attending grammar school in Savannah, he went to St. Joseph's Academy, then to South Georgia Agricultural and Mechanical College, North Georgia Agricultural and Mechanical College and Chatham Academy.

He was graduated second in his class from the University of Georgia in 1890. He received his Bachelor of Laws degree a year later, sharing first honor. He was a member of Sigma Nu fraternity, Phi Beta Kappa, ODK and Beta Gamma Sigma college scholarship organizations and the Elks. He attended Glenn Memorial Methodist church, served on the board of trustees of Emory University. The Salvation Army was one of his favorite charities.

Surviving Mr. Arkwright are his son, Preston S. Arkwright, Jr., a daughter, Mrs. Glenville Giddings, both of Atlanta, and four grandchildren, Dr. Glenville Giddings, Jr., Miss Dorothy Giddings, and Misses Ann Stringfellow Arkwright and

Martha Stanley Arkwright. His wife, the former Dorothy Colquitt, of Atlanta, died last September.

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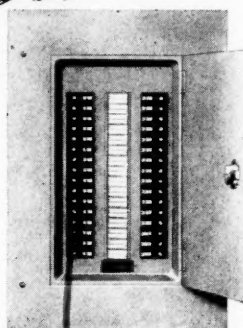


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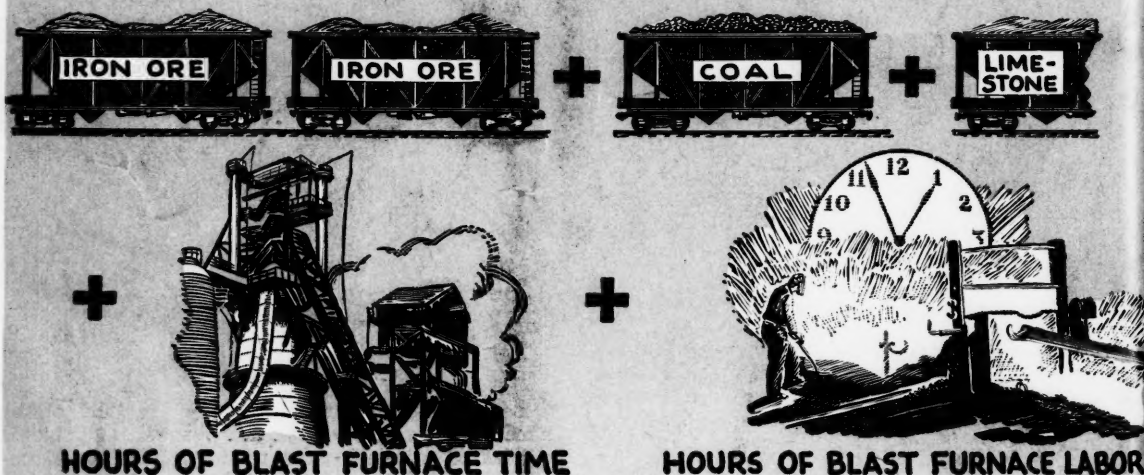
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